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Appendix A: Navy Activities Descriptions

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APPENDIX A NAVY ACTIVITIES DESCRIPTIONS

The United States (U.S.) Department of the Navy has been conducting military readiness activities throughout the Hawaii and Southern California Range Complexes and the Pacific Ocean for decades. The tempo and types of training and testing activities have fluctuated within the Hawaii-Southern California Training and Testing (HSTT) Study Area (Study Area) due to changing requirements, the introduction of new technologies, the dynamic nature of international events, advances in warfighting doctrine and procedures, and force structure changes. Such developments have influenced the frequency, duration, intensity, and location of required training and testing.

A.1 TRAINING ACTIVITIES

The Navy's training activities are organized generally into eight primary mission areas and a miscellaneous category (other training) that includes those activities that do not fall within one of the eight primary mission areas, but are an essential part of Navy training. Many of the activities described here may have a land component, occurring both at sea and on or over land. In this Environmental Impact Statement (EIS)/Overseas EIS (OEIS), only the at-sea component is analyzed.

In addition, because the Navy conducts a number of activities within major range events, descriptions of those major range events are also included in this appendix. It is important to note that these major range events are comprised entirely of individual activities described in the primary mission areas.

A.1.1 ANTI-AIR WARFARE TRAINING

Anti-air warfare is the primary mission area that addresses combat operations by air and surface forces against hostile aircraft. Navy ships contain an array of modern anti-aircraft weapon systems, including naval guns linked to radar-directed fire-control systems, surface-to-air missile systems, and radar-controlled cannons for close-in point defense. Strike/fighter aircraft carry anti-aircraft weapons, including air-to-air missiles and aircraft cannons. Anti-air warfare training encompasses events and exercises to train ship and aircraft crews in employment of these weapons systems against simulated threat aircraft or targets. Anti-air warfare training includes surface-to-air gunnery, surface-to-air and air-to-air missile exercises, and aircraft force-on-force combat maneuvers.

A.1.1.1 Air Combat Maneuver

Activity Name	Activity Description	
Anti-Air Warfare		
Air Combat Maneuver (ACM)	Aircrews engage in flight maneuvers designed to gain a tactical advantage during combat.	
Long Description	Basic flight maneuvers where aircrew engage in offensive and defensive maneuvering against each other. During an air combat maneuver engagement, no ordnance is fired, countermeasures such as chaff and flares may be used. These maneuvers typically involve two aircraft; however, based upon the training requirement, air combat maneuver exercises may involve over a dozen aircraft. Participants typically are two or more aircraft. No weapons are fired.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., F/A-18, F-35, F-5) **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Areas: 188,189, 190,192, 193, 194 Southern California Range Complex: Warning Area 291 (Tactical Maneuvering Areas)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	No munitions fired. Flare and chaff may be used. All flare and chaff accounted for in flare exercise and chaff exercise events.	

A.1.1.2 Air Defense Exercise

Activity Name	Activity Description	
Anti-Air Warfare		
Air Defense Exercises (ADEX)	Aircrew and ship crews conduct defensive measures against threat aircraft or missiles.	
Long Description	Aircrew and ship personnel perform measures designed to defend against attacking threat aircraft or missiles or reduce the effectiveness of such attack. This exercise involves full detection though engagement sequence. Aircraft operate at varying altitudes and speeds. This exercise may include Air Intercept Control exercises which involve aircraft controllers on vessels, in fixed-wing aircraft or at land based locations, use search radars to track and direct friendly aircraft to intercept the threat aircraft, and Detect to Engage exercises in which personnel on vessels use their search radars in the process of detecting, classifying, and tracking enemy aircraft or missiles up to the point of engagement.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., F/A-18, F-35, E-2), surface vessels (all) **Systems:** None **Ordnance/Munitions:** None **Targets:** Other aircraft, unmanned drones **Duration:** 1 to 4 hours	**Location:** Hawaii Range Complex : Warning Areas: 188,189, 190,192, 193, 194 Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	No weapons fired	

A.1.1.3 Gunnery Exercise (Air-to-Air) – Medium-Caliber

Activity Name	Activity Description	
Anti-Air Warfare		
Gunnery Exercise (Air-to-Air) Medium Caliber (GUNEX [A-A]) – medium-caliber	Aircrews defend against threat aircraft with cannons (machine gun).	
Long Description	Fighter jet aircrews defend against threat aircraft with cannons (machine gun). An event involves two or more fighter aircrafts and a target banner towed by a contracted aircraft (e.g., Lear jet). The banner target is recovered after the event.	
Information Typical to the Event	**Platform:** Fixed- wing aircraft (e.g., F/A-18C, F-35) **Systems:** None **Ordnance/Munitions:** Medium-caliber munition (non-explosive) **Targets:** Towed banner **Duration:** 1 to 2 hours	**Location:** Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material (non-explosive projectile) strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Medium-caliber projectiles, casings	
Detailed Military Expended Material Information	Projectiles Casings	
Assumptions used for Analysis	Only non-explosive munitions used Target is recovered	

A.1.1.4 Missile Exercise (Air-to-Air)

Activity Name	Activity Description	
Anti-Air Warfare		
Missile Exercise (Air-to-Air)	Aircrews defend against threat aircraft with missiles.	
Long Description	An event involves two or more jet aircraft and a target. Missiles have either a high explosive warhead or are non-explosive practice munitions. The target is either an unmanned aerial target drone (e.g.: BQM-34, BQM-74), a Tactical Air-Launched Decoy, or a parachute suspended illumination flare. Target drones deploy parachutes and are recovered by boat or helicopter; Tactical Air-Launched Decoys and illumination flares are expended and not recovered. These events typically occur at high altitudes. Anti-air missiles may also be employed when training against threat missiles.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., F/A-18C, F-35) **Systems:** None **Ordnance/Munitions:** Anti-air missiles (e.g., AIM-7, AIM-9, AIM-120, AIM-132 [non-explosive and high explosive]) **Targets:** BQM-34, BQM-74 (Figure A-1), illumination flare (e.g., LUU-2) (Figure A-2), Tactical Air-Launched Decoy (Figure A-3) **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Area 188 Southern California: Warning Area 291, Southern California Anti-submarine Warfare Range, Fleet Training Area Hot, Missile Range
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** In-air explosives; aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (target and missile fragment), Aircraft strike (birds only), missiles (non-explosive) **Entanglement:** Parachutes **Ingestion:** Military expended materials (missile fragments, parachute, flare casing, target fragments)	
Detailed Military Expended Material Information	Missile and target fragments Parachutes Flare casings	
Assumptions used for Analysis	All missiles are explosive (Alternatives 1 and 2), and all missiles explode at high altitude All propellant and explosives are consumed Assume 1.5 flares per Missile Exercise event	

Figure A-1: BQM-74 (Aerial Target)

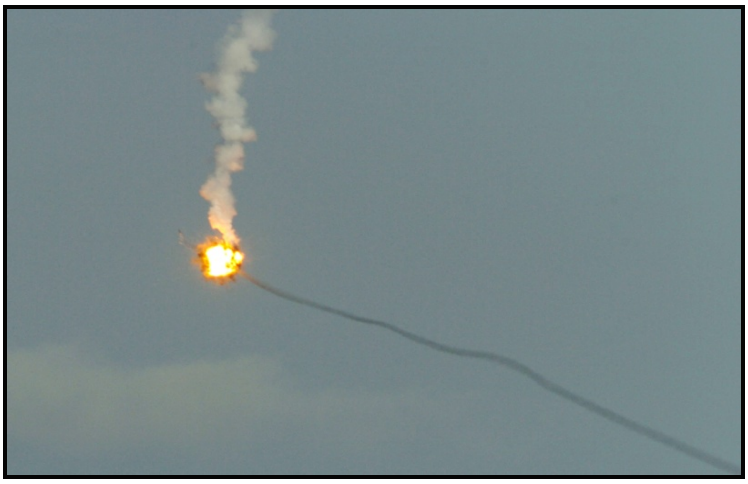

Figure A-2: LUU-2B/B Illuminating Flare (Aerial Target)

Figure A-3: Tactical Air-Launched Decoy (Aerial Target)

A.1.1.5 Gunnery Exercise (Surface-to-Air) – Large Caliber

Activity Name	Activity Description	
Anti-Air Warfare		
Gunnery Exercise (Surface-to-Air) – Large Caliber **(GUNEX [S-A]) – Large Caliber**	Surface vessel crews defend against threat aircraft or missiles with large-caliber guns.	
Long Description	Surface vessel personnel defend against threat aircraft or missile targets with guns to disable or destroy the threat. An event involves one vessel and a simulated threat aircraft or anti-vessel missile that is detected by the vessel's radar. Large-caliber guns fire projectiles, either non-explosive or high explosive (configured to explode in air); to disable or destroy the threat before it reaches the vessel. The target is towed by a commercial air services jet.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., CG, DDG, FFG, Littoral Combat Ship), fixed-wing aircraft **Systems:** None **Ordnance/Munitions:** Large caliber (e.g., 5-inch gun, 76 mm, 57 mm [non-explosive] under the No Action Alternative and high explosive under Alternatives 1 and 2) **Targets:** Towed banners behind aircraft **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Areas 188, 192, Mela South Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise, vessel noise, weapons firing noise, in-air explosives **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles), vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Projectile fragments, target fragments	
Detailed Military Expended Material Information	Projectiles Projectile fragments Target fragments	
Assumptions used for Analysis	All projectiles under the No Action Alternative are assumed to be non-explosive All projectiles under Alternatives 1 and 2 assumed to be high explosive. All projectiles explode well above surface	

A.1.1.6 Gunnery Exercise (Surface-to-Air) – Medium Caliber

Activity Name	Activity Description	
Anti-Air Warfare		
Gunnery Exercise (Surface-to-Air) – Medium Caliber (GUNEX [S-A]) – Medium Caliber	Surface vessel crews defend against threat aircraft or missiles with medium-caliber guns.	
Long Description	Surface vessel personnel defend against threat aircraft or missile targets with guns to disable or destroy the threat. An event involves one vessel and a simulated threat aircraft or anti-vessel missile that is detected by the vessel's radar. Medium-caliber guns fire projectiles, typically non-explosive, to disable or destroy the threat before it reaches the vessel. The target is towed by a commercial air services jet.	
Information Typical to the Event	**Platform:** Surface vessel (all), fixed-wing aircraft **Systems:** None **Ordnance/Munitions:** Medium-caliber munitions (non-explosive) **Targets:** Towed banners behind aircraft **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Areas 188, 192, Mela South Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise, Vessel noise, Weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles), vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Projectiles, casings	
Detailed Military Expended Material Information	Projectiles Casings	
Assumptions used for Analysis	All projectiles non-explosive. Close-In Weapon System employed in all events. Routine Close-In Weapon System maintenance related firing can occur throughout study area, as long as a clear range is established.	

A.1.1.7 Missile Exercise (Surface-to-Air)

Activity Name	Activity Description	
Anti-Air Warfare		
Missile Exercise (Surface-to-Air) (MISSILEX [S-A])	Surface vessel crews engage threat missiles and aircraft with missiles.	
Long Description	Surface vessel crews defend against threat missiles and aircraft with vessel launched missiles. The event involves a simulated threat aircraft or anti-ship missile which is detected by the vessel's radar. Vessel launched anti-air missiles are fired (high explosive) to disable or destroy the threat. The target typically is a remote controlled drone. Anti-Air missiles may also be used to train against land attack missiles.	
Information Typical to the Event	**Platform:** Surface vessels (all) **Systems:** None **Ordnance/Munitions:** Anti-air missiles (e.g., Sea Sparrow, Standard Missile SM-2, Rolling Airframe Missile [high explosive]) **Targets:** Unmanned drones (e.g., BQM-34, BQM-74) **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Area 188 Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise, in-air explosives **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (missile fragments), vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Missile fragments	
Detailed Military Expended Material Information	Missile fragments	
Assumptions used for Analysis	Assume all anti-air missiles are high explosive. Missile explodes well above surface. All explosive and propellant consumed. Target typically not destroyed, unmanned drones are recovered.	

A.1.1.8 Missile Exercise – Man Portable Air Defense System

Activity Name	Activity Description	
Anti-Air Warfare		
Missile Exercise-Man Portable Air Defense System (MISSILEX-MANPADS)	Marines employ the man portable air defense systems, a shoulder fired surface to air missile, against threat missiles or aircraft.	
Long Description	Marines employ the man-portable air defense systems, a shoulder fired surface to air missile, against threat missiles or aircraft. An event involves Marines firing the man-portable air defense system at remote piloted or ballistic aerial targets. Missile Exercise-Man Portable Air Defense System may also be conducted by combat forces from shore locations. The exercise may involve live fire or tracking only, without the firing of an actual missile.	
Information Typical to the Event	**Platform:** None **Systems:** Man Portable Defense Systems **Ordnance/Munitions:** Stinger or other man portable missiles (explosive) **Targets:** Remotely piloted target, ballistic aerial target **Duration:** Varies	**Location:** Southern California Range Complex: Shore Bombardment Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** In-air explosives **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (missile and target fragments) **Entanglement:** None **Ingestion:** Missile and target fragments	
Detailed Military Expended Material Information	Missile and target fragments	
Assumptions used for Analysis	None	

A.1.2 AMPHIBIOUS WARFARE TRAINING

Amphibious warfare is a type of naval warfare involving the utilization of naval firepower and logistics, and Marine Corps landing forces to project military power ashore. Amphibious warfare encompasses a broad spectrum of operations involving maneuver from the sea to objectives ashore, ranging from reconnaissance or raid missions involving a small unit, to large-scale amphibious operations involving over one thousand Marines and Sailors, and multiple ships and aircraft embarked in a Strike Group.

Amphibious warfare training includes tasks at increasing levels of complexity, from individual, crew, and small unit events to large task force exercises. Individual and crew training include the operation of amphibious vehicles and naval gunfire support training. Small-unit training operations include events leading to the certification of a Marine Expeditionary Unit as "deployment ready" or "special operations capable," depending on if Marine Special Forces are attached to the unit. Such training includes shore assaults, boat raids, airfield or port seizures, and reconnaissance. Larger-scale amphibious exercises involve ship-to-shore maneuver, shore bombardment and other naval fire support, and air strike and close air support training.

A.1.2.1 Naval Surface Fire Support Exercise Land-Based Target

Activity Name	Activity Description	
Amphibious Warfare		
Naval Surface Fire Support Exercise (Land) **(FIREX [Land])**	Surface vessel crews use small-, medium-, and large-caliber guns to fire on land-based targets in support of forces ashore.	
Long Description	Surface vessel crews use small-, medium-, and large-caliber (main battery) guns to support forces ashore. One or more vessels position themselves up to six nautical miles from the target area and a land based spotter relays type and exact location of the target. After observing the fall of the shot, the spotter relays any adjustments needed to reach the target. Once the rounds are on target, the spotter requests a sufficient number to effectively destroy the target. This exercise occurs on land ranges where high explosive and non-explosive practice ordnance is authorized and is often supported by target shapes such as tanks, truck, trains, or aircraft on the ground.	
Information Typical to the Event	**Platform:** Surface combatant vessels (e.g., CG, DDG) **Systems:** None **Ordnance/Munitions:** Small, medium, and large caliber (explosive and non-explosive) **Targets:** Other aircraft, unmanned drones **Duration:** 4 to 6 hours	**Location:** Southern California Range Complex: Shore Bombardment Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, MEM strike **Entanglement:** None **Ingestion:** Projectile casings	
Detailed Military Expended Material Information	Casings	
Assumptions used for Analysis	NO LAND BASED IMPACTS INCLUDED IN THIS DOCUMENT-Projectile impact is on the land and is not further analyzed for this DEIS/OEIS	

A.1.2.2 Naval Surface Fire Support Exercise at Sea

Activity Name	Activity Description	
Amphibious Warfare		
Naval Surface Fire Support Exercise (At Sea) **(FIREX at Sea)**	Surface vessel crews use large-caliber guns to support forces ashore; however, the land target is simulated at sea. Rounds are scored by passive acoustic hydrophones located at or near the target area.	
Long Description	Surface vessel crews use large-caliber guns to support forces ashore; however, the land target is simulated at sea. Rounds are scored by passive acoustic hydrophones located at or near the target area. The scoring system is comprised of hydrophones permanently installed on the ocean floor as part of the Barking Sands Tactical Underwater Range west of Kauai. A scoring system provides a realistic presentation, such as a land mass with topography, to the vessel's combat system. This virtual land target area overlays the hydrophone array. The vessel fires its ordnance into the target area and the acoustic noise resulting from the impact of the round landing in the water is detected by the hydrophones. The scoring system triangulates the exact point of impact of the round, allowing the exercise to be conducted as if the vessel were firing at an actual land target. Surface vessel crews use large-caliber (main battery) guns to support forces ashore.	
Information Typical to the Event	**Platform:** Surface combatant vessels (e.g., DDG, CG), rigid-hull inflatable boat (for recovering buoys) **Systems:** None **Ordnance/Munitions:** Large caliber (5-inch rounds) explosive and non-explosive **Targets:** None **Duration:** 2 to 4 hours of firing, 18 hours total	**Location:** Hawaii Range Complex: Warning Area-188 (including Barking Sands Underwater Range Extension and Barking Sands Tactical Underwater Range)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise, underwater explosives (E5) **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles and projectile fragments), vessel strike **Entanglement:** None **Ingestion:** Projectile fragments	
Detailed Military Expended Material Information	Projectiles Projectile fragments	
Assumptions used for Analysis	Events occur greater than 12 nautical miles from shore Non-explosive practice munitions may be used. Acoustic sensors can detect projectile splash. High explosives may be used. Assume all explosive rounds detonate on impact with water surface	

A.1.2.3 Amphibious Assault

Activity Name	Activity Description	
Amphibious Warfare		
Amphibious Assault	Forces move ashore from vessels at sea for the immediate execution of inland objectives.	
Long Description	Landing forces embarked in vessels, craft, or helicopters launch an attack from the sea onto a hostile shore. Amphibious assault is conducted for the purposes of prosecuting further combat operations, obtaining a site for an advanced naval or airbase, or denying the enemy use of an area. Unit Level Training exercises involve one or more amphibious vessels, and their associated watercraft and aircraft, to move personnel and equipment from vessel to shore without the command and control and supporting elements involved in a full scale event. The goal is to practice loading, unloading, and movement and to develop the timing required for a full-scale exercise.	
Information Typical to the Event	**Platform:** Amphibious vessels and landing craft (e.g., LHA, LHD, LPD, LSD), amphibious vehicles, rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 2 weeks	**Location:** Hawaii Range Complex: Pacific Missiles Range Facility (Main Base), Marine Corps Base Hawaii, Marine Corps Training Area Bellows Southern California Range Complex Silver Strand Training Complex: Boat Lanes 11–14
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike; aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None anticipated	
Assumptions used for Analysis	Typical event: 1 to 3 amphibious vessels (e.g., LHA or LHD, LPD, LSD); 2 to 8 landing craft (Landing Craft, Air Cushioned; Landing Craft, Utility); 4 to 14 amphibious assault vehicles; up to 22 aircraft (e.g., MH-53, H-46/MV-22, AH-1, UH-1, AV-8); a Marine Expeditionary Unit (2,200 Marines)	

A.1.2.4 Amphibious Assault – Battalion Landing

Activity Name	Activity Description	
Amphibious Warfare		
Amphibious Assault – Battalion Landing	Marine Corps Battalion Landing Team forces launch an attack from sea to a hostile or potentially hostile shore for the immediate execution of inland maneuver.	
Long Description	Marine Corps Battalion Landing Team moves from amphibious vessels at sea, into hostile territory, establish a beachhead, then occupy the area, or move further inland for an extended period. Battalion Landing Team is a task organization composed of an infantry battalion reinforced by combat support and Combat Service Support units for amphibious assaults. The Battalion Landing Team is the ground force element of a Marine expeditionary unit when formed into a Marine air-ground task force.	
Information Typical to the Event	**Platform:** Amphibious vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 4 days	**Location:** Southern California Range Complex: San Clemente Island, Shore Bombardment Area, Shallow Water Training Range (Nearshore),Eel Cove, West Cove, Wilson Cove
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.2.5 Amphibious Raid

Activity Name	Activity Description	
Amphibious Warfare		
Amphibious Raid	Small unit forces move swiftly from vessels at sea for a specific short term mission. These are quick operations with as few personnel as possible.	
Long Description	Small unit forces swiftly move from amphibious vessels at sea into hostile territory for a specific mission, including a planned withdrawal. Raids are conducted to inflict loss or damage, secure information, create a diversion, confuse the enemy, or capture or evacuate individuals or material. Amphibious raid forces are kept as small as possible to maximize stealth and speed of the operation. An event may employ assault amphibian vehicle units, small boat units, small unit live-fire and non-live-fire operations. Surveillance or reconnaissance unmanned surface and aerial vehicles may be used during this event.	
Information Typical to the Event	**Platform:** Amphibious assault vessels (e.g., LHA, LHD), amphibious transport dock and dock landing ships (e.g., LPD, LSD), amphibious vehicles (landing crafts, air cushioned, and amphibious assault vehicles), small boats (e.g., rigid-hull inflatable boats) **Systems:** Unmanned surface and aerial vehicles **Ordnance/Munitions:** Non-explosive practice munitions **Targets:** None **Duration:** 4 to 8 hours	**Location:** Hawaii Range Complex: Pacific Missile Range Facility (Main Base), Marine Corps Base Hawaii, Marine Corps Training Area Bellows Silver Strand Training Complex: Boat Lanes 1–8, 11–14 (Bravo, Delta I, II, III, Echo, Fox, Golf, Hotel) Southern California Range Complex: West Cove, Horse Beach Cove, North West Harbor, Camp Pendleton Amphibious Assault Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None anticipated	
Assumptions used for Analysis	Firing of weapons during these events accounted for in gunnery exercises, surface to surface activities	

A.1.2.6 Expeditionary Fires Exercise/Supporting Arms Coordination Exercise

Activity Name	Activity Description	
Amphibious Warfare		
Expeditionary Fires Exercise/Supporting Arms Coordination Exercise	Military units provide integrated and effective close air support, Naval Surface Fire Support fire, and Marine Corps artillery fire in support of amphibious operations.	
Long Description	Military units provide integrated and effective close air support, Naval Surface Fire Support fire, and Marine Corps artillery fire in support of amphibious operations. The mission of the exercises is to achieve effective integration of Naval gunfire, close air support, and Marine Corps artillery fire support.	
Information Typical to the Event	**Platform:** Surface vessels, amphibious vessels, 4 AH-1Ws attack rotary-wing aircraft, 6 fixed-wing strike fighter or attack aircraft **Systems:** None **Ordnance/Munitions:** Large caliber (e.g., howitzers, 81 mm mortars, 5-inch rounds, MK-80 series bombs [explosive and non-explosive]) **Targets:** None **Duration:** 8 days	**Location:** Southern California Range Complex: San Clemente Island, Shore Bombardment Area, Shallow Water Training Range (Nearshore)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike, vessel strike **Entanglement:** None **Ingestion:**	
Detailed Military Expended Material Information	Shell casings from large-caliber rounds	
Assumptions used for Analysis	Only the at-sea components of this activity are analyzed in this document.	

A.1.2.7 Humanitarian Assistance Operations

Activity Name	Activity Description	
Amphibious Warfare		
Humanitarian Assistance Operation/Non-Combatant Evacuation Operation	Military units evacuate noncombatants from hostile or unsafe areas or provide humanitarian assistance in times of disaster.	
Long Description	Military units evacuate noncombatants from hostile or unsafe areas to safe havens or to provide humanitarian assistance in times of disaster. Non-Combatant Evacuation Operation is conducted by military units (generally Marine Corps) usually operating in conjunction with Navy ships and aircraft. Non-combatants are evacuated when their lives are endangered by war, civil unrest, or natural disaster. Marine Corps Marine expeditionary unit train for evacuations in hostile environments that require the use of force, though usually there is no opposition to evacuation from the host country. Helicopters and landing crafts could be expected to participate in this operation during day or night. No ordnance is used.	
Information Typical to the Event	**Platform: Systems:** Rotary and fixed-wing aircraft, amphibious vessels **Ordnance/Munitions:** None **Targets:** None **Duration:** Varies	**Location:** Hawaii Range Complex: Pacific Missiles Range Facility (Main Base), Niihau, Marine Corps Base Hawaii, Marine Corps Training Area Bellows Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike, vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.3 STRIKE WARFARE TRAINING

Strike warfare includes training of fixed-wing fighter/attack aircraft or rotary-wing aircraft in delivery of precision guided munitions, non-guided munitions, rockets, and other ordnance against land targets in all weather and light conditions. Training events typically involve a simulated strike mission with a flight of four or more aircraft. The strike mission may simulate attacks on "deep targets" (i.e., those geographically distant from friendly ground forces), or may simulate close air support of targets within close range of friendly ground forces. Laser designators from aircraft or ground personnel may be employed for delivery of precision guided munitions. Some strike missions involve no-drop events in which prosecution of targets is simulated, but video footage is often obtained by onboard sensors.

A.1.3.1 Bombing Exercise (Air-to-Ground)

Activity Name	Activity Description	
Strike Warfare		
Bombing Exercise (Air-to-Ground)	Bombing exercise involves training of strike fighter aircraft delivery of ordnance against land targets in day or night conditions.	
Long Description	Bombing exercise involves training of strike fighter aircraft delivery of ordnance against land targets in day or night conditions. The bombing exercise may involve close air support training in direct support of and in close proximity to forces on the ground, such as Navy or Marine forces engaged in training exercises on land, and may include the use of targeting laser.	
Information Typical to the Event	**Platform:** Fixed-wing strike fighter aircraft **Systems:** Targeting laser systems **Ordnance/Munitions:** MK-76, BDU-45, and BDU-45 (non-explosive) **Targets:** Land targets **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Kaula Island
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** Targeting laser **Physical Disturbance and Strike:** Military expended materials (non-explosive munitions), aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Bomb and target fragments	
Assumptions used for Analysis	The typical bomb release altitude is below 3,000 feet (ft.) (914 meters [m]) and within a range of 1,000 yards (914 m) for unguided munitions Only the in-water impacts of strike warfare activities are analyzed in the EIS/OEIS – NO LAND BASED IMPACTS INCLUDED IN THIS DOCUMENT	

A.1.3.2 Gunnery Exercise (Air-to-Ground)

Activity Name	Activity Description	
Strike Warfare		
Gunnery Exercise (Air-to-Ground)	Strike fighter aircraft and helicopter crews use guns to attack ground targets, day or night, with the goal of destroying or disabling enemy vehicles, structures, or personnel.	
Long Description	Strike fighter aircraft and helicopter crews use guns to attack ground targets, day or night, with the goal of destroying or disabling enemy vehicles, structures, or personnel. A flight of two strike fighter aircraft will begin its descent to the target from an altitude of about 3,000 ft. (914 m) while still several miles away. Within a distance of 4,000 ft. (1,219 m) from the target, each aircraft will fire a burst of rounds before reaching an altitude of 1,000 ft. (305 m), then break off and reposition for another strafing run until each aircraft expends its exercise ordnance allowance. This exercise may include the use of targeting laser.	
Information Typical to the Event	**Platform:** Fixed-wing strike fighter, rotary-wing aircraft **Systems:** **Ordnance/Munitions:** Small- and medium-caliber weapons (e.g., 20/25 mm, 50-caliber, and 7.63 mm) **Targets:** Land Targets **Duration:** 1 hour	**Location:** Hawaii Range Complex: Kaula Island
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** Targeting laser **Physical Disturbance and Strike:** Military expended materials(non-explosive munitions) **Entanglement:** None **Ingestion:** Military expended materials (non-explosive munitions)	
Detailed Military Expended Material Information	Small-caliber projectiles	
Assumptions used for Analysis	Only the in-water impacts of strike warfare activities are analyzed in the EIS/OEIS – NO LAND BASED IMPACTS INCLUDED IN THIS DOCUMENT.	

A.1.4 ANTI-SURFACE WARFARE TRAINING

Anti-surface warfare is a type of naval warfare in which aircraft, surface ships, and submarines employ weapons and sensors in operations directed against enemy surface ships or boats. Air-to-surface exercises are conducted by long-range attacks using air-launched cruise missiles or other precision guided munitions, or using aircraft cannon. Anti-surface warfare also is conducted by warships employing torpedoes, naval guns, and surface-to-surface missiles. Submarines attack surface ships using torpedoes or submarine-launched, anti-ship cruise missiles. Training in anti-surface warfare includes surface-to-surface gunnery and missile exercises, air-to-surface gunnery and missile exercises, and submarine missile or torpedo launch events. Gunnery and missile training generally involves expenditure of ordnance against a towed target. A sinking exercise is a specialized training event that provides an opportunity for ship, submarine, and aircraft crews to use multiple weapons systems to deliver high explosive ordnance on a deactivated vessel, which is deliberately sunk.

Anti-surface warfare also encompasses maritime security, that is, the interception of a suspect surface ship by a Navy ship for the purpose of boarding-party inspection or the seizure of the suspect ship. Training in these tasks is conducted in visit, board, search and seizure exercises.

A.1.4.1 Maritime Security Operations

Activity Name	Activity Description	
Anti-Surface Warfare		
Maritime Security Operations	Helicopter and surface vessel crews conduct a suite of Maritime Security Operations (e.g., visit, search, board, and seizure; maritime interdiction operations; force protection; and anti-piracy operation).	
Long Description	Helicopter and surface ship crews conduct a suite of Maritime Security Operations (e.g., visit search, board, and seizure; maritime interdiction operations; force protection; and anti piracy operation). These activities involve training of boarding parties delivered by helicopters and surface ships to surface vessels for the purpose of simulating vessel search and seizure operations. Various training scenarios are employed and may include small arms with non-explosive blanks and surveillance or reconnaissance unmanned surface and aerial vehicles. The entire exercise may last two to three hours. Vessel Visit, Board, Search, and Seizure: Military personnel from vessels and aircraft board suspect vessels, potentially under hostile conditions. Maritime Interdiction Operations: Vessels and aircraft train in pursuing, intercepting, and ultimately detaining suspect vessels. Oil Platform Defense: Naval personnel train to defend oil platforms or other similar at sea structures. Warning Shot/Disabling Fire: Naval personnel train in the use of weapons to force fleeing or threatening small boats (typically operating at high speeds) to come to a stop. Ship Force Protection: Vessel crews train in tracking multiple approaching, circling small craft, assessing threat potential, and communicating amongst crewmates and other vessels to ensure vessels are protected against attack. Anti Piracy Training: Naval personnel train in deterring and interrupting piracy activity. Training includes large vessels (pirate "mother ships"), and multiple small, maneuverable, and fast craft.	
Information Typical to the Event	**Platform:** Surface vessel (any), rotary-wing aircraft, small boats, high speed vessels, unmanned vehicles (surface and aerial) **Systems:** None **Ordnance/Munitions:** Small caliber (non-explosive) **Targets:** Range support vessel, high performance boats, remote controlled high speed targets (Figure A-5 and Figure A-6) towing surface targets **Duration:** Up to 3 hours	**Location:** Hawaii Operating Area Southern California Range Complex: W-291, Operating Area 3803, Southern California Anti-Submarine Warfare Range Silver Strand Training Complex: Boat Lanes 1-10
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles), vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Small-caliber projectiles, casings	

Activity Name	Activity Description
Anti-Surface Warfare	
Maritime Security Operations	Helicopter and surface vessel crews conduct a suite of Maritime Security Operations (e.g., visit, search, board, and seizure; maritime interdiction operations; force protection; and anti-piracy operation).
Detailed Military Expended Material Information	Small-caliber projectiles Casings
Assumptions used for Analysis	Maritime security operations is a broad term used to describe activities intended train naval forces in the skills necessary to protect naval vessels from small boat attack, counter piracy and drug operations (maritime interdiction operations and visit, board, search, and seizure), and protect key infrastructure (e.g. oil platforms). Maritime security operations need to remain broad as naval forces need to be able to tailor training events to respond to emergent threats. Maritime security operations events typically do not involve live fire of weapons. All maritime security operations events involve vessel movement, sometimes at high rates of speed (naval vessels maneuvering to overtake suspect vessel and/or small boats (targets) closing in and maneuvering around naval vessels), and some event involve helicopters and boarding parties. Maritime security operations training events are conducted proximate to naval homeports (San Diego, California) including during times of transit in and out of port, as well as during major training events.

A.1.4.2 Gunnery Exercise Surface-to-Surface (Ship) – Small Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise Surface-to-Surface (Ship) – Small Caliber	Vessel crews engage surface targets with vessel's small-caliber guns designed to provide close range defense against patrol boats, smaller boats, swimmers, and floating mines.	
Long Description	This exercise involves vessel crews engaging surface targets at sea with small-caliber (0.50 caliber or smaller) weapons. Vessels use small-caliber weapons to practice defensive marksmanship, typically against stationary floating targets. The target may be a 10 ft. diameter red balloon (Killer Tomato, see Figure A-4), a 50 gallon steel drum, or other available target, such as a cardboard box. Some targets are expended during the exercise and are not recovered. Vessel crew qualifications conducted at sea employ stationary targets on deck. Small-caliber projectiles fired during these events will be expended in the water. Shipboard protection systems utilizing small-caliber projectiles will train against high speed mobile targets.	
Information Typical to the Event	**Platform:** Surface vessels **Systems:** None **Ordnance/Munitions:** Small caliber (non-explosive) **Targets:** Recoverable or expendable floating target (stationary or towed), remote controlled high speed targets (Figure A-5 and Figure A-6) **Duration:** 2 to 3 hours	**Location:** Hawaii Range Complex: Warning Areas -188, 191, 192, 193, 194, 196, Mela South Southern California Range Complex: Warning Area-291, Southern California Anti-Submarine Warfare Range, Shore Bombardment Area HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, military expended material strike (projectile, target), **Entanglement:** None **Ingestion:** Small-caliber projectiles, casings, target fragments	
Detailed Military Expended Material Information	Small-caliber projectiles Casings Target fragments	
Assumptions used for Analysis	Small-caliber gun rounds per event: 1,000 to 3,000 non-explosive practice munitions Majority of events will occur proximate to Naval stations	

Figure A-4: "Killer Tomato" Stationary Floating Target

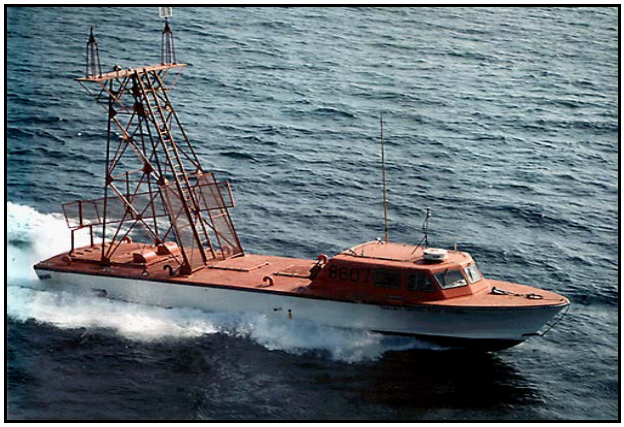

Figure A-5: QST-35 Seaborne Powered Target

Figure A-6: High Speed Maneuvering Surface Target

A.1.4.3 Gunnery Exercise Surface-to-Surface (Ship) – Medium Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise Surface-to-Surface (Ship) – Medium Caliber	Vessel crews engage surface targets with vessel's medium-caliber guns designed to provide close range defense against patrol boats, smaller boats, swimmers, and floating mines.	
Long Description	This exercise involves vessel crews engaging surface targets at sea with medium-caliber (larger than 0.50 calibers up to 56 mm) weapons. Vessels use medium-caliber weapons to practice defensive marksmanship, typically against a stationary floating target (a 10 ft. diameter red balloon [Killer Tomato]) and high speed mobile targets. Some targets are expended during the exercise and are not recovered. Shipboard protection systems (Close-In Weapon System) utilizing medium-caliber projectiles will train against high speed mobile targets.	
Information Typical to the Event	**Platform:** Surface vessels **Systems:** None **Ordnance/Munitions:** Medium caliber (high explosive or non-explosive) **Targets:** Recoverable and expendable floating target (stationary or towed), remote control high-speed targets **Duration:** 2 to 3 hours	**Location:** Hawaii Range Complex: Warning Areas -188, 191, 192, 193, 194, 196, Mela South Southern California Range Complex: Warning Area-291, Southern California Anti-Submarine Warfare Range, Shore Bombardment Area HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E1, E2), vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, military expended material strike (projectiles and casings, projectile and target fragments) **Entanglement:** None **Ingestion:** Medium-caliber projectiles and casings, target fragments, projectile fragments	
Detailed Military Expended Material Information	Medium-caliber projectiles and casings, target fragments, projectile fragments Approximately 200 medium-caliber rounds per event One target used per event. Approximately 50 percent of targets are “Killer Tomatoes” (usually recovered). Approximately 35 percent are high-speed maneuvering targets, which are recovered. Approximately 15 percent of targets are other stationary targets such as a steel drum	
Assumptions used for Analysis	None	

A.1.4.4 Gunnery Exercise Surface-to-Surface (Ship) – Large Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise Surface-to-Surface (Ship) – Large Caliber	Vessel crews engage surface targets with vessel's large-caliber guns designed to provide defense against vessels, patrol boats, smaller boats.	
Long Description	This exercise involves vessels' gun crews engaging surface targets at sea with their main battery large-caliber (typically 57 mm, 76 mm, and 5-inch) guns. Targets include the QST-35 seaborne powered target, high speed maneuverable surface target, or a specially configured remote controlled water craft. Some targets are expended during the exercise and are not recovered. The exercise proceeds with the target boat approaching from about 10 nm distance. The target is tracked by radar and when within a predetermined range, it is engaged first with "warning shots". As threats get closer all weapons may be used to disable the threat. This exercise may involve a single firing vessel, or be undertaken in the context of a coordinated larger exercise involving multiple ships, including a major training event. Large-caliber guns will also be fired during weapon certification events and in conjunction with weapon maintenance. During all events, either high explosive or non-explosive rounds may be used. High explosive rounds can either be fused for detonation on impact (with water surface or target), or for proximity to the target (in air detonation).	
Information Typical to the Event	**Platform:** Surface vessels (e.g., CG, DDG, FFG, LCS) **Systems:** None **Ordnance/Munitions:** Large caliber (e.g., 57 mm, 76 mm, and 5-inch [high explosive and non-explosive]) **Targets:** Remote controlled high speed targets **Duration:** Up to 3 hours	**Location:** Hawaii Range Complex: Warning Areas -188, 191, 192, 193, 194, 196, Mela South Southern California Range Complex: Warning Area-291, Southern California Anti-Submarine Warfare Range, Shore Bombardment Area HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E3, E5), vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, military expended material strike (projectile, target fragments) **Entanglement:** None **Ingestion:** Target fragments, projectile fragments	
Detailed Military Expended Material Information	Large-caliber projectiles and casings Target fragments Projectile fragments	
Assumptions used for Analysis	For analytical purposes assume all high explosive rounds are fused to detonate upon impact with water surface or target After impacting the water, the high explosive rounds are expected to detonate within three feet of the surface. Non-explosive rounds and fragments from the high explosive rounds will sink to the bottom of the ocean For Alternative 2, analysis considers the introduction of (two) kinetic weapon equipped vessels being introduced to the fleet. Increases in events (six) and projectiles expended (240) reflect the likely training requirements of this new weapon system Assume each non-explosive projectile will be up to 5-inch diameter and 30-inch length, and each firing will also expend a metallic sleeve used to convey the projectile down the gun barrel	

A.1.4.5 Gunnery Exercise Surface-to-Surface (Boat) – Small Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise Surface-to-Surface (Boat) – Small Caliber	Small boat crews engage surface targets with small-caliber weapons.	
Long Description	Boat crews engage surface targets with small-caliber weapons. Boat crews may use high or low speeds to approach and engage targets simulating other boats, swimmers, floating mines, or near shore land targets with small-caliber (up to and including .50 caliber) weapons. A commonly used target is an empty steel drum. A number of different types of boats are used depending on the unit using the boat and their mission. Boats are most used to protect ships in harbors and high value units, such as: aircraft carriers, nuclear submarines, liquid natural gas tankers, etc., while entering and leaving ports, as well as to conduct riverine operations, and various naval special warfare operations. The boats used by these units include: small unit river craft, combat rubber raiding craft, rigid-hull inflatable boats, patrol craft, and many other versions of these types of boats. These boats use inboard or outboard, diesel or gasoline engines with either propeller or water jet propulsion.	
Information Typical to the Event	**Platform:** Boats **Systems:** None **Ordnance/Munitions:** Small caliber (non-explosive), anti-swimmer grenades **Targets:** Recoverable or expendable floating target **Duration:** 1 hour	**Location:** Southern California Range Complex: Warning Area-291, Southern California Anti-Submarine Warfare Range, Shore Bombardment Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise, in-water explosives (E4) **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, military expended material strike (projectile, target fragments) **Entanglement:** None **Ingestion:** Projectiles, casings, and target fragments	
Detailed Military Expended Material Information	Small-caliber projectiles Casings Target fragments	
Assumptions used for Analysis	*The specific areas are where activities typically occur. They can occur throughout the full area listed in Table 2.8-1 of Chapter 2. Majority of events will occur proximate to naval stations. Events will occur relatively near shore due to short range of boats and safety concerns. Events mostly occur within three nm of the shoreline, but can occur further from shore.	

A.1.4.6 Gunnery Exercise Surface-to-Surface (Boat) – Medium Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise Surface-to-Surface (Boat) – Medium Caliber	Small boat crews engage surface targets with medium-caliber weapons.	
Long Description	Boat crews engage surface targets with medium-caliber weapons. Boat crews may use high or low speeds to approach and engage targets simulating other boats, floating mines, or near shore land targets with medium-caliber (up to and including 40 mm) weapons. A commonly used target is an empty steel drum. A number of different types of boats are used depending on the unit using the boat and their mission. Boats are most used to protect ships in harbors and high value units, such as: aircraft carriers, nuclear submarines, liquid natural gas tankers, etc., while entering and leaving ports, as well as to conduct riverine operations, and various naval special warfare operations. The boats used by these units include: small unit river craft, combat rubber raiding craft, rigid-hull inflatable boats, patrol craft, and many other versions of these types of boats. These boats use inboard or outboard, diesel or gasoline engines with either propeller or water jet propulsion.	
Information Typical to the Event	**Platform:** Boats **Systems:** None **Ordnance/Munitions:** Medium caliber (up to and including 40 mm [explosive and non-explosive]) **Targets:** Recoverable or expendable floating target (stationary or towed) **Duration:** 1 hour	**Location:** Hawaii Range Complex: Warning Area 188 Southern California Range Complex: Warning Area-291, Shore Bombardment Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E1, E2), vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectile, target fragments), vessel and in-water device strike **Entanglement:** None **Ingestion:** Projectiles and target fragments, projectiles, casings	
Detailed Military Expended Material Information	Projectiles and target fragments, projectiles, casings One target used per event, typically a stationary target such as a 50-gallon (189 liter) steel drum	
Assumptions used for Analysis	Assume all Alternatives 1 and 2 events include the use of some explosive rounds Most events will involve boat crews training with MK 203 40 mm grenade launcher Most events will occur proximate to Navy homeports (San Diego)	

A.1.4.7 Missile Exercise Surface-to-Surface

Activity Name	Activity Description	
Anti-Surface Warfare		
Missile Exercise (Surface-to-Surface)	Surface vessel crews defend against surface threats (vessels or boats) with missiles.	
Long Description	Surface vessels launch missiles at surface maritime targets with the goal of destroying or disabling enemy vessels or boats. After detecting and confirming a surface threat, the vessel will fire precision guided anti-surface missile. Events with destroyers and cruisers will involve long range (over the horizon) harpoon (or similar) anti surface missiles. While past harpoon events occurred during sinking exercises, requirement exists for non sinking exercise events to certify ship crews. If a sinking exercise target is unavailable, towed sled would likely be used. Events with Littoral Combat Ships will involve shorter range anti-surface missiles. Events with Littoral Combat Ships would be to certify vessel's crew to defend against "close-in" (less than 10 miles) surface threats. These exercises are live fire, that is, a missile is fired down range. Anti-surface missiles could be equipped with either high explosive or non-explosive warheads.	
Information Typical to the Event	**Platform:** Surface vessels (e.g., CG, DDG, LCS) **Systems:** None **Ordnance/Munitions:** Anti-surface missiles, Harpoons (explosive and non-explosive) **Targets:** High speed surface targets, towed sleds **Duration:** 2 to 4 hours	**Location:** Hawaii Range Complex: Warning Area 188 Southern California Range Complex: Warning Area 291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E10), vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike; military expended material strike (missiles and target fragments) **Entanglement:** None **Ingestion:** Missile fragments, target fragments	
Detailed Military Expended Material Information	Missiles, missile fragments Target fragments	
Assumptions used for Analysis	Assume one missile and one target per event While missile could explode above water's surface after contacting target, analysis assumes all warheads explode at or just below surface	

A.1.4.8 Gunnery Exercise Air-to-Surface – Small Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise (Air-to-Surface) – Small Caliber	Helicopter aircrews, including embarked personnel, use small-caliber guns to engage surface targets.	
Long Description	Helicopters, carrying several air crewmen, fly a racetrack pattern around an at-sea target. Each gunner will engage the target with small-caliber weapons. Targets range from a smoke float, an empty steel drum, to high speed remote controlled boats and jet-skis.	
Information Typical to the Event	**Platform:** Helicopter **Systems:** None **Ordnance/Munitions:** Small caliber (non-explosive) **Targets:** Recoverable or expendable floating target (stationary or towed), remote high speed target **Duration:** 1 hour	**Location:** Hawaii Range Complex: Warning Areas 188, 191, 192, 193, 194, 196, Mela South Southern California Range Complex: Southern California Anti-Submarine Warfare Range, (T-3, T-4, T-5, Mine Training Range-2), Warning Area-291, Shore Bombardment Area,
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** In-water device strike, military expended material strike (projectiles), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Projectiles, target fragments, casings	
Detailed Military Expended Material Information	Projectiles, Target fragments, casings One target used per event. Expendable smoke float (50 percent), stationary target (45 percent), or remote controlled target (5 percent)	
Assumptions used for Analysis	Most events will occur proximate to Naval Stations where MH-60 helicopters are home based and target services are available	

A.1.4.9 Gunnery Exercise Air-to-Surface – Medium Caliber

Activity Name	Activity Description	
Anti-Surface Warfare		
Gunnery Exercise (Air-to-Surface) – Medium Caliber	Fixed-wing and helicopter aircrew, including embarked personnel, use medium-caliber guns to engage surface targets.	
Long Description	Fighter and helicopter aircrew, including embarked personnel, engage surface targets with medium-caliber guns. Targets simulate enemy ships, boats, swimmers, and floating/near-surface mines. Fighter aircraft descend on a target firing high explosive or non-explosive practice munitions medium-caliber projectiles. Helicopters, carrying several air crewmen, fly a racetrack pattern around an at-sea target. Crew will engage the target with medium-caliber weapons. Targets range from a smoke float, an empty steel drum, to high speed remote controlled boats and jet-skis.	
Information Typical to the Event	**Platform:** Fixed-wing (e.g., F/A-18, F-35); Helicopter (e.g., MH-60) **Systems:** None **Ordnance/Munitions:** Medium caliber (non-explosive and explosive) **Targets:** Recoverable or expendable floating target (stationary or towed), remote high speed target **Duration:** 1 hour	**Location:** Hawaii Range Complex: Warning Areas 188, 191, 192, 193, 194, 196, Mela South Southern California Range Complex: Southern California Anti-Submarine Warfare Range, (T-3, T-4, T-5, Mine Training Range-2), Warning Area-291
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E1, E2), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectile, target fragments), In-water device strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Projectile, casings and target fragments	
Detailed Military Expended Material Information	Projectiles, casings, projectile and target fragments One target used per event. Expendable smoke float (50 percent), stationary target (45 percent), or remote controlled target (5 percent)	
Assumptions used for Analysis	Most medium-caliber air-to-surface gunnery exercises will be with non-explosive training projectiles. High-explosive rounds will supplement when non-explosive training projectiles are not available	

A.1.4.10 Missile Exercise Air-to-Surface – Rocket

Activity Name	Activity Description	
Anti-Surface Warfare		
Missile Exercise (Air-to-Surface) Rocket	Fixed-wing and helicopter aircrew fire both precision-guided and unguided rockets against surface targets.	
Long Description	Fighter, maritime patrol aircraft, and helicopter aircrews fire both precision-guided and unguided rockets against surface targets. Aircraft involved may be unmanned. Fixed-wing aircraft (fighters or maritime patrol aircraft) approach an at-sea surface target from high altitude and launch high explosive non-explosive precision guided rockets. Helicopters designate an at-sea surface target with a laser or optics for precision guided high explosive or non-explosive practice munitions rockets.	
Information Typical to the Event	**Platform:** Fixed-wing (e.g., F/A-18, F-35, P-8, P-3, unmanned aerial vehicle) Helicopters (MH-60, Fire Scout) **Systems:** None **Ordnance/Munitions:** Rockets (non-explosive for No Action Alternative; high explosive for Alternatives 1 and 2) **Targets:** Recoverable floating target (stationary or towed) **Duration:** 1 hour	**Location:** Hawaii Range Complex: Warning Area 188 Southern California Range Complex: Warning Area 291, Southern California Anti-Submarine Warfare Range, Fleet Training Area Hot, Missile Ranges
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E5), aircraft noise **Energy:** target Laser **Physical Disturbance and Strike:** In-water device strike, military expended material strike (rocket, rocket and target fragments) **Entanglement:** None **Ingestion:** Target fragments, rocket fragments	
Detailed Military Expended Material Information	Rockets, rocket fragments Target fragments	
Assumptions used for Analysis	Assume all explosive rockets detonate in water. Assume all rockets under the No Action Alternative are non-explosive. Assume all rockets under Alternatives 1 and 2 are explosive Rockets may be used in conjunction with force protection events	

A.1.4.11 Missile Exercise Air-to-Surface

Activity Name	Activity Description	
Anti-Surface Warfare		
Missile Exercise (Air-to-Surface)	Fixed-wing and helicopter aircrew fire precision-guided missiles against surface targets.	
Long Description	Fighter, maritime patrol aircraft, and helicopter aircrews fire both precision-guided missiles and unguided rockets against surface targets. Aircraft involved may be unmanned. Fixed-wing aircraft (fighters or maritime patrol aircraft) approach an at-sea surface target from high altitude, and launch high explosive precision guided missiles. Helicopters designate an at-sea surface target with a laser or optics for a precision guided high explosive or non-explosive missile. Helicopter launched missiles typically pass through the target's "sail," and detonate at, or just below, the water's surface.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft and helicopters **Systems:** None **Ordnance/Munitions:** Missiles (high explosive or non-explosive) **Targets:** Recoverable floating target (stationary or towed), Remotely operated target **Duration:** 2 hours	**Location:** Hawaii Range Complex: Warning Area-188 Southern California range Complex: Shore Bombardment Area, Southern California Anti-Submarine Warfare Range (Laser Training Range 1/2)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E6, E8), aircraft noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** In-water device strike, Military expended material strike (missile fragment), Aircraft strike (birds only) **Entanglement:** None **Ingestion:** Missile fragments, target fragments	
Detailed Military Expended Material Information	Missile fragments Target fragments	
Assumptions used for Analysis	Assume one missile and one target per event While missile could explode above water's surface after contacting target, analysis assumes all warheads explode at or just below surface	

A.1.4.12 Bombing Exercise Air-to-Surface

Activity Name	Activity Description	
Anti-Surface Warfare		
Bombing Exercise (Air-to-Surface)	Fixed-wing aircrews deliver bombs against surface targets.	
Long Description	Fixed-wing aircrews deliver bombs against surface targets. Fixed-wing aircraft conduct a bombing exercise against stationary floating targets (e.g.: MK-58 smoke buoy). An aircraft clears the area, deploys a smoke buoy or other floating target, and then delivers high explosive or non-explosive practice munitions bomb(s) on the target. A range boat may be used to deploy targets for an aircraft to attack. Exercises for strike fighters typically involve a flight of two aircraft delivering unguided or guided munitions that may be either high explosive or non-explosive practice munitions. The following munitions may be employed by strike fighter aircraft in the course of the bombing exercise: Unguided munitions: Non explosive Sub Scale Bombs (MK-76 and BDU-45); explosive and non-explosive general purpose bombs (MK-80 series); MK-20 Cluster Bomb (explosive, non-explosive). Precision-guided munitions: Laser-guided bombs (explosive, non-explosive); Laser-guided Training Rounds (non-explosive); Joint Direct Attack Munition (explosive, non-explosive).	
Information Typical to the Event	**Platform:** Fixed-wing (e.g., F/A-18, F-35, P-8, P-3) **Systems:** None **Ordnance/Munitions:** Bombs (e.g., MK-76, BDU-45, MK-80 series, MK-20 [high explosive, non-explosive]) **Targets:** Expendable floating target (e.g., smoke float) **Duration:** 1 hour	**Location:** Hawaii Range Complex: Hawaii Operating Area Southern California Range Complex: Southern California Anti-Submarine Warfare Range T-3, T-4, T-5, Mine Training Range-2, Shore Bombardment Area HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E8, E9, E10, E12), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive bomb), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Bomb fragments, target fragments, smoke floats	
Detailed Military Expended Material Information	Bomb fragments Target fragments Smoke floats	
Assumptions used for Analysis	Approximately 90 percent of non-explosive bombs are the sub-scale bombs such as the MK-76 and BDU-48	

A.1.4.13 Laser Targeting

Activity Name	Activity Description	
Anti-Surface Warfare		
Laser Targeting	Fixed-winged, helicopter, and vessel crews illuminate enemy targets with lasers.	
Long Description	Fixed-winged and helicopter aircrew and shipboard personnel illuminate enemy targets with lasers for engagement by aircraft with laser guided bombs or missiles. This exercise may be conducted alone or in conjunction with other events utilizing precision guided munitions, such as anti surface missiles and guided rockets. Events where weapons are fired are addressed in the appropriate activity (e.g. air-to-surface missile exercise). Lower powered lasers may also be used as non-lethal deterrents during maritime security operations (force protection).	
Information Typical to the Event	**Platform:** Vessels, fixed-wing aircraft, rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** None unless conducted with other event (e.g., missile exercise) **Targets:** Land targets, Remote-controlled surface targets **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Warning Area 188 Southern California Range Complex: Southern California Anti-Submarine Warfare Range, Shore Bombardment Area, (Laser Training Range 1/2)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** In-air low energy lasers **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Laser targeting for missile/rocket guidance will occur in areas where these events also occur Use of lasers as force protection non-lethal deterrents will primarily occur proximate to Navy homeports Land target impacts are not analyzed within this EIS/OEIS	

A.1.4.14 Sinking Exercise

<table>
<tr><th>Activity Name</th><th colspan="2">Activity Description</th></tr>
<tr><td colspan="3">Anti-Surface Warfare</td></tr>
<tr><td>Sinking Exercise</td><td colspan="2">Aircraft, vessel, and submarine crews deliver ordnance on a seaborne target, usually a deactivated ship, which is deliberately sunk using multiple weapon systems.</td></tr>
<tr><td>Long Description</td><td colspan="2">Ship personnel and aircrew deliver high explosive ordnance on a seaborne target, (large deactivated vessel), which is deliberately sunk using multiple weapon systems. A sinking exercise is typically conducted by aircraft, surface vessels, and submarines in order to take advantage of the ability to fire high explosive ordnance on a full size ship target.
The target is typically a decommissioned ship made environmentally safe for sinking according to U.S. Environmental Protection Agency standards. The location is greater than 50 nautical miles from shore and in water depths greater than 6,000 ft.
Vessel, aircraft, and submarine crews attack with coordinated tactics and deliver live high explosive ordnance to sink the target. Non-explosive practice munitions may be used during the initial stages to extend target life. Typically, the exercise lasts for four to eight hours and possibly over 1 to 2 days, however it is unpredictable, and ultimately ends when the ship sinks.</td></tr>
<tr><td>Information Typical to the Event</td><td>Platform: Vessels, Aircraft, Submarines
Systems: None
Ordnance/Munitions: Potentially all available (explosive and non-explosive), torpedo
Targets: Decommissioned ship made environmentally safe for sinking (according to U.S. Environmental Protection Agency standards)
Duration: 4 to 8 hours, possibly over 1 to 2 days (unpredictable and ultimately ends when the ship sinks)</td><td>Location:
Hawaii Range Complex: Hawaii Operating Area
Southern California Range Complex: Warning Area 291</td></tr>
<tr><td>Potential Impact Concerns
(Information regarding deconstruct categories and stressors)</td><td colspan="2">Acoustic: Underwater explosives (E3, E5, E9, E10, E11, E12), vessel noise, aircraft noise, weapons firing noise
Energy: In-air low energy lasers
Physical Disturbance and Strike: Military expended material strike (non-explosive projectiles, projectile fragments), vessel strike, aircraft strike (birds only)
Entanglement: Guidance wires
Ingestion: Munitions fragments, casings</td></tr>
</table>

Activity Name	Activity Description
Anti-Surface Warfare	
Sinking Exercise	Aircraft, vessel, and submarine crews deliver ordnance on a seaborne target, usually a deactivated ship, which is deliberately sunk using multiple weapon systems.
Detailed Military Expended Material Information	Munitions fragments, non-explosive ordnance, guidance wires, casings Ship hulk (decommissioned ship made environmentally safe for sinking according to U.S. Environmental Protection Agency standards)
Assumptions used for Analysis	Greater than 50 nautical miles from shore and in water depths greater than 6,000 ft. The participants and assets could include: • One full-size target ship hulk • One to five CG, DDG, or FFG ships • One to 10 F/A-18, or MPA aircraft • One or two HH-60H, MH-60R/S, or SH-60B helicopters • One E-2 aircraft for Command and Control • One submarine • One to three range clearance aircraft. • Two to four Harpoon surface-to-surface or air-to-surface missiles • Two to eight air-to-surface Maverick missiles • Two to sixteen MK-82 general purpose bombs • Two to four Hellfire air-to-surface missiles • One or two SLAM-ER air-to-surface missiles • Two to six AGM-88 High-speed Anti-Radiation Missiles (HARM) • Fifty to 500 rounds 5-inch and 76 mm gun • One to two MK-48 heavyweight submarine-launched torpedo • Two Thousand medium-caliber rounds • Assume 2 guidance wires expended per event

A.1.5 ANTI-SUBMARINE WARFARE TRAINING

Anti-submarine warfare involves helicopter and maritime patrol aircraft, ships, and submarines. These units operate alone or in combination, in operations to locate, track, and neutralize submarines. Controlling the undersea battlespace is a unique naval capability and a vital aspect of sea control. Undersea battlespace dominance requires proficiency in anti-submarine warfare. Every deploying strike group and individual surface combatant must possess this capability.

Various types of active and passive sonar are used by the Navy to determine water depth, locate mines, and identify, track, and target submarines. Passive sonar "listens" for sound waves by using underwater microphones, called hydrophones, which receive, amplify, and process underwater sounds. No sound is introduced into the water when using passive sonar. Passive sonar can indicate the presence, character, and movement of submarines. However, passive sonar provides only a bearing (direction) to a sound-emitting source; it does not provide an accurate range (distance) to the source. Active sonar is needed to locate objects because active sonar provides both bearing and range to the detected contact (such as an enemy submarine).

Active sonar transmits pulses of sound that travel through the water, reflect off objects and return to a receiver. By knowing the speed of sound in water and the time taken for the sound wave to travel to the object and back, active sonar systems can quickly calculate direction and distance from the sonar platform to the underwater object. Active sonar is necessary to detect and track submarines that do not emit detectable levels of noise, either because of noise reduction design features or because of the presence of overwhelming background noise levels.

The Navy's anti-submarine warfare training plan, including the use of active sonar in at-sea training scenarios, includes multiple levels of training. Individual-level anti-submarine warfare training addresses basic skills such as detection and classification of contacts, distinguishing discrete acoustic signatures including those of ships, submarines, and marine life, and identifying the characteristics, functions, and effects of controlled jamming and evasion devices.

More advanced, integrated anti-submarine warfare training exercises involving active sonar is conducted in coordinated, at-sea operations during multi-dimensional training events involving submarines, ships, aircraft, and helicopters. This training integrates the full anti-submarine warfare continuum from detecting and tracking a submarine to attacking a target using either exercise torpedoes or simulated weapons. Training events include detection and tracking exercises against "enemy" submarine contacts; torpedo employment exercises against the target; and exercising command and control tasks in a multi-dimensional battlespace.

A.1.5.1 Tracking Exercise/Torpedo Exercise – Submarine

Activity Name	Activity Description	
Anti-Submarine Warfare		
Tracking Exercise/Torpedo Exercise – Submarine	Submarine crews search, track, and detect submarines. Exercise torpedoes may be used during this event.	
Long Description	The anti-submarine warfare tracking/torpedo exercise-submarine involves a submarine employing hull mounted and/or towed array sonar against an anti-submarine warfare target such as a MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, a MK-30, or another submarine. During this event, passive sonar is used almost exclusively; active sonar use is restricted because it would reveal the tracking submarine's presence to the target submarine. The preferred type of range for this exercise is an instrumented underwater training range with the capability to track the locations of submarines and targets, to enhance the after-action learning component of the training. Three such ranges exist in the Hawaii-Southern California Training and Test (HSTT) Study Area; the Barking Sands Tactical Underwater Range and Barking Sands Underwater Range Extension west of Kauai under the control of the Pacific Missile Range Facility, and the Southern California Anti-submarine Warfare Range west of San Clemente Island. This exercise may involve a single submarine, or be undertaken in the context of a coordinated larger exercise involving multiple aircraft, ships, and submarines, including a major range event. The tracking exercise becomes a torpedo exercise when the submarine launches an exercise torpedo. Torpedo exercises typically have a range support vessel (surface craft or a support helicopter) to launch and recover targets and torpedoes. The exercise torpedo is recovered by helicopter or small craft. The preferred range for this exercise is an instrumented underwater range, but it may be conducted in other Operating Areas (OPAREAs) depending on training requirements and available assets.	
Information Typical to the Event	**Platform:** One or more submarines, support craft **Systems:** Mid-frequency (primarily passive) and high-frequency sonar **Ordnance/Munitions:** Exercise torpedoes (non-explosive torpedo exercise only) **Targets:** Submarine MK-30, MK-39 Expendable Mobile Anti-Submarine Warfare Training Target **Duration:** 8 hours	**Location:** Hawaii Operating Area, (including Barking Sands Underwater Range Extension; Barking Sands Tactical Underwater Range; Shallow Water Training Range, North Maui Submarine Operating Area Southern California Operating Area, Southern California Anti-submarine Warfare Range, Shallow Water Training Range (Offshore/Nearshore) HSTT Transit Corridor

Activity Name	Activity Description
Anti-Submarine Warfare	
Tracking Exercise/Torpedo Exercise – Submarine	Submarine crews search, track, and detect submarines. Exercise torpedoes may be used during this event.
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency acoustic countermeasure (ASW4), hull-mounted sonar (MF3), high-frequency sonar (HF1, HF3, HF8), heavyweight torpedo (TORP2), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, aircraft strike (birds only), and military expended material strike (torpedo accessories) **Entanglement:** Guidance wires **Ingestion:** None
Detailed Military Expended Material Information	Torpedo accessories (guidance wires, ballast weights, flex tubing) Expended countermeasures
Assumptions used for Analysis	Tracking exercise can occur in all locations, torpedo exercise will not occur in Hawaii-Southern California Training and Test Transit Corridor. Torpedoes are recovered Guidance wire has a low breaking strength and breaks easily. Weights and flex tubing sink rapidly Other Hawaii-Southern California Training and Test area events typically refer to those events that occur while vessels are in transit (e.g., HSTT Transit Corridor)

A.1.5.2 Tracking Exercise/Torpedo Exercise – Surface

Activity Name	Activity Description	
Anti-Submarine Warfare		
Tracking Exercise/Torpedo Exercise – Surface	Surface vessel crews search, track, and detect submarines. Exercise torpedoes may be used during this event.	
Long Description	Surface ships search, detect, and track threat submarines to determine a firing position to launch a torpedo and attack the submarine. A surface vessel operates at slow speeds while employing hull mounted and/or towed array sonar. Passive or active sonar is employed depending on the type of threat submarine, the tactical situation, and environmental conditions. The target for this exercise is a MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30 Recoverable Training Target, or live submarine. Tracking exercise/torpedo exercise – surface could occur anywhere throughout the Hawaii-Southern California Training and Test Study Area. This exercise may involve a single ship, or be undertaken in the context of a coordinated larger exercise involving multiple aircraft, ships, and submarines, including a major range event. The tracking exercise becomes a torpedo exercise when the ship launches an exercise torpedo. The exercise torpedo is recovered by helicopter or small craft. The preferred range for this exercise is an instrumented underwater range, but it may be conducted in other operating areas depending on training requirements and available assets.	
Information Typical to the Event	**Platform:** One or more surface vessels, rotary-wing aircraft **Systems:** Mid-frequency sonar, Nixie (countermeasure system) **Ordnance/Munitions:** Exercise torpedoes (non-explosive only) **Targets:** Submarine MK-30 or MK-39 Expendable Mobile Anti-Submarine Warfare Training Target **Duration:** 2 to 4 hours	**Location:** Hawaii Range Complex: Hawaii Operating Area (including Barking Sands Underwater Range Extension; Barking Sands Tactical Underwater Range; Shallow Water Training Range Southern California Range Complex: Southern California Operating Areas, Point Mugu Sea Range (overlap area only)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (ASW1), mid-frequency acoustic countermeasure (ASW3, ASW4), high-frequency sonar (HF1), hull mounted sonar (MF1, MF2, MF3, MF11), helicopter dipping sonar (MF4), high duty cycle variable depth sonar (MF12), lightweight torpedo (TORP1), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike; military expended material strike **Entanglement:** None **Ingestion:** Target fragments	
Detailed Military Expended Material Information	MK-39 Expendable Mobile Anti-Submarine Warfare Training Target Torpedo accessories (ballast weights) from exercise torpedoes	
Assumptions used for Analysis	Tracking exercise can occur in all locations, torpedo exercise will not occur in Point Mugu Sea Range portion of Southern California. Submarines may provide service as the target except for torpedo exercise events. Torpedoes are recovered Other Hawaii-Southern California Training and Test area events typically refer to those events that occur while vessels are in transit	

A.1.5.3 Tracking Exercise/Torpedo Exercise – Helicopter

Activity Name	Activity Description	
Anti-Submarine Warfare		
Tracking Exercise/ Torpedo Exercise-Helicopter	Helicopter crews search, track, and detect submarines. Recoverable air launched torpedoes may be employed against submarine targets.	
Long Description	This exercise involves helicopters using sonobuoys and dipping sonar to search for, detect, classify, localize, and track a simulated threat submarine with the goal of determining a firing solution that could be used to launch a torpedo and destroy the submarine. Sonobuoys are typically employed by a helicopter operating at altitudes below 3,000 ft. (914 m). Both passive and active sonobuoys are employed. The dipping sonar is employed from an altitude of about 50 ft. (15 m) after the search area has been narrowed based on the sonobuoy search. Both passive and active sonar are employed. The anti-submarine warfare target used for this exercise will likely be an Expendable Mobile Anti-submarine Warfare Training Target, a MK-30 recoverable exercise target or a live submarine if available. This exercise may involve a single aircraft, or be undertaken in the context of a coordinated larger exercise involving multiple aircraft and vessels, including a major range event. The tracking exercise becomes a torpedo exercise when the helicopter launches an exercise torpedo. The exercise torpedo is recovered by a special recovery helicopter or small craft. The preferred range for this exercise is an instrumented range, but it may be conducted in other operating areas depending on training requirements and available assets.	
Information Typical to the Event	**Platform:** Helicopters, surface vessels **Systems:** Mid-frequency helicopter dipping sonar, sonobuoys **Ordnance/Munitions:** Exercise torpedoes (non-explosive) **Targets: MK-39** Expendable Mobile Anti-Submarine Warfare Training Target or MK-30 recoverable target, or live submarine **Duration:** 2 to 4 hours	**Location:** Hawaii Range Complex: Hawaii Operating Area (including Barking Sands Underwater Range Extension; Barking Sands Tactical Underwater Range; Shallow Water Training Range Southern California Range Complex: Southern California Anti-submarine Warfare Range, Shallow Water Training Range, San Clemente Island Underwater Range HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Helicopter dipping sonar (MF4), sonobuoy (MF5), mid-frequency acoustic countermeasure (ASW4), lightweight torpedo (TORP1]), aircraft noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, aircraft strike (birds only), vessel and in-water device strike **Entanglement:** Parachutes **Ingestion:** Parachutes	
Detailed Military Expended Material Information	One Expendable Mobile Anti-Submarine Warfare Training Target If target is air-dropped, one parachute per target Up to 20 sonobuoys per event (one parachute for each sonobuoy) Torpedo accessories (ballast weights, parachutes)	
Assumptions used for Analysis	Tracking exercise can occur in all locations, torpedo exercise will not occur in Hawaii-Southern California Training and Testing Transit Corridor or Point Mugu Sea Range portion of Southern California. Submarines may provide service as the target.	

A.1.5.4 Tracking Exercise/Torpedo Exercise – Maritime Patrol Aircraft

<table>
<tr><th>Activity Name</th><th colspan="2">Activity Description</th></tr>
<tr><td colspan="3">Anti-Submarine Warfare</td></tr>
<tr><td>Tracking Exercise/ Torpedo Exercise – Maritime Patrol Aircraft</td><td colspan="2">Maritime patrol aircraft crews search, detect, and track submarines. Recoverable air launched torpedoes may be employed against submarine targets.</td></tr>
<tr><td>Long Description</td><td colspan="2">This exercise involves fixed-wing maritime patrol aircraft employing sonobuoys to search for, detect, classify, localize, and track a simulated threat submarine with the goal of determining a firing solution that could be used to launch a torpedo and destroy the submarine.

Sonobuoys are typically employed by a maritime patrol aircraft operating at altitudes below 3,000 ft. (914 m), however, sonobuoys may be released at higher altitudes. Sonobuoys are deployed in specific patterns based on the expected threat submarine and specific water conditions. Depending on these two factors, these patterns will cover many different size areas. Both passive and active sonobuoys are employed. For certain sonobuoys, tactical parameters of use may be classified. The anti-submarine warfare target used for this exercise may be a MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, a MK-30 target, or a live submarine. This exercise may involve a single aircraft, or be undertaken in the context of a coordinated larger exercise involving multiple aircraft and vessels, including a major range event.

The tracking exercise becomes a torpedo exercise when the aircraft launches an exercise torpedo.

The exercise torpedo is recovered by helicopter or small craft. The preferred range for this exercise is an instrumented underwater range, but it may be conducted in other operating areas depending on training requirements and available assets.</td></tr>
<tr><td>Information Typical to the Event</td><td>Platform: One or more fixed-wing aircraft (Maritime Patrol Aircraft [manned or unmanned]), surface combatant or small vessels
Systems: Sonobuoys
Ordnance/Munitions: Exercise torpedoes (non-explosive)
Targets: Mk-39 Expendable Mobile Anti-Submarine Warfare Training Target, a MK-30 recoverable target, or a live submarine
Duration: 2 to 8 hours</td><td>Location:
Hawaii Operating Area, (including Barking Sands Underwater Range Extension; Barking Sands Tactical Underwater Range; Shallow Water Training Range
Southern California Operating Area, Southern California Anti-submarine Warfare Range, Shallow Water Training Range (Offshore/Nearshore)</td></tr>
<tr><td>Potential Impact Concerns
(Information regarding deconstruct categories and stressors)</td><td colspan="2">Acoustic: Sonobuoys (MF5), lightweight torpedo (TORP1]), vessel noise, aircraft noise
Energy: None
Physical Disturbance and Strike: Aircraft strike (birds only), vessel and in-water device strike, military expended material strike; torpedo accessories (ballast weights, parachutes)
Entanglement: Parachutes
Ingestion: Parachutes</td></tr>
</table>

Activity Name	**Activity Description**
Anti-Submarine Warfare	
Tracking Exercise/ Torpedo Exercise – Maritime Patrol Aircraft	Maritime patrol aircraft crews search, detect, and track submarines. Recoverable air launched torpedoes may be employed against submarine targets.
Detailed Military Expended Material Information	One Expendable Mobile Anti-Submarine Warfare Training Target (MK-39); MK-30 are recovered Torpedo accessories (ballast weights, parachutes) from exercise torpedoes Expended sonobuoys with parachutes
Assumptions used for Analysis	Tracking exercise can occur in all locations, torpedo exercise will not occur in Point Mugu Sea Range portion of Southern California Submarine may provide service as the target. If target is air-dropped, one parachute per target Other Hawaii-Southern California Training and Test area events typically refer to those events that occur while vessels are in transit

A.1.5.5 Tracking Exercise – Maritime Patrol Aircraft Extended Echo Ranging Sonobuoys

Activity Name	Activity Description	
Anti-Submarine Warfare		
Tracking Exercise-Maritime Patrol Aircraft Extended Echo Ranging Sonobuoys	Maritime patrol aircraft crews search, detect and track submarines using extended echo ranging sonobuoys. Recoverable air launched torpedoes may be employed against submarine targets.	
Long Description	This exercise involves fixed-wing maritime patrol aircraft employing Improved Extended Echo Ranging and Multistatic Active Coherent sonobuoy systems to search for, detect, classify, localize, and track a simulated threat submarine with the goal of determining a firing solution that could be used to launch a torpedo and destroy the submarine. The Improved Extended Echo Ranging events use the SSQ-110A sonobuoy as an impulsive source, while the Multistatic Active Coherent events utilize the SSQ-125 sonobuoy as a tonal source. Each exercise would include the use of approximately 10 SSQ-110A or SSQ-125 sonobuoys. The anti-submarine warfare target used for this exercise may be a MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, a MK-30 target, or a live submarine. This exercise may involve a single aircraft, or be undertaken in the context of a coordinated larger exercise involving multiple aircraft and ships, including a major range event.	
Information Typical to the Event	**Platform:** Maritime Patrol Aircraft **Systems:** Improved Extended Echo Ranging and multistatic active coherent sonobuoy systems **Ordnance/Munitions:** None **Targets:** MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, a MK-30 recoverable target, or a live submarine **Duration:** 2 to 8 hours	**Location:** Hawaii Operating Area Southern California Operating Areas, Point Mugu Sea Range (overlap area only), Shallow Water Training Range (Nearshore/Offshore)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonobuoy (ASW2), underwater explosives (E4), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only), military expended material strike **Entanglement:** Parachutes **Ingestion:** Parachutes, sonobuoy fragments	
Detailed Military Expended Material Information	One Expendable Mobile Anti-Submarine Warfare Training Target (MK-39); MK-30 are recovered Expended sonobuoys with parachutes	
Assumptions used for Analysis	If target is air-dropped, one parachute per target	

A.1.5.6 Kilo Dip – Helicopter

Activity Name	Activity Description	
Anti-Submarine Warfare		
Kilo Dip-Helicopter	Helicopter crews briefly deploy their dipping acoustic sources to ensure the system's operational status.	
Long Description	This brief exercise involves an MH-60 helicopter and its dipping sonar. The helicopter transits to one of the Helicopter Offshore Training Areas located off the coast of southern California. There, the helicopter lowers its dipping sonar into the ocean and transmits the sonar briefly to ensure that the sonar system is operating correctly.	
Information Typical to the Event	**Platform:** MH-60 helicopter **Systems:** Mid-frequency helicopter dipping sonar **Ordnance/Munitions:** None **Targets:** None **Duration:** 20 minutes	**Location:** Southern California Range Complex: Helicopter Offshore Training Areas
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency helicopter dipping sonar (e.g., MF4) **Energy:** None **Physical Disturbance and Strike:** Helicopter strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.5.7 Submarine Command Course Operations

Activity Name	Activity Description	
Anti-Submarine Warfare		
Submarine Command Course	Train prospective submarine Commanding Officers to operate against surface, air, and subsurface threats	
Long Description	Train prospective Commanding Officers on submarines to operate against each other to locate and conduct simulated attacks. Submarine Command Course Operations is a Commander, U.S. Submarine Forces requirement to provide training to prospective submarine commanders in rigorous and realistic scenarios. This training assesses prospective commanding officers' abilities to operate in numerous hostile environments, encompassing surface vessels, aircraft, as well as other submarines. The course incorporates anti-submarine warfare tracking exercise, anti-submarine warfare torpedo exercise.	
Information Typical to the Event	**Platform:** Submarines, surface ships, and fixed-wing and rotary-wing aircraft **Systems:** Mid-frequency (primarily passive) and high-frequency sonar **Ordnance/Munitions:** Exercise torpedoes (torpedo exercise only **Targets:** MK-30 recoverable target **Duration:** 3 to 5 days (at-sea portion)	**Location:** Hawaii Operating Area, Maui North/South
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency hull-mounted sonar (MF1, MF2, MF3), helicopter dipping sonar (MF4), sonobuoy (MF5), mid-frequency acoustic countermeasure (ASW3, ASW4), high-frequency hull-mounted sonar (HF1), lightweight torpedo (TORP1), heavyweight torpedo (TORP2) **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, military expended material strike, aircraft strike (birds only) **Entanglement:** Guidance wires, parachutes **Ingestion:** Torpedo accessories, parachutes	
Detailed Military Expended Material Information	Torpedo accessories (guidance wires, ballast weights, flex tubing) Expended countermeasures Expended sonobuoys with parachutes	
Assumptions used for Analysis	Torpedoes are recovered Guidance wire brittle, breaks easily. Weights sink rapidly, etc. For Alternatives 1 and 2 the anti-submarine warfare portion of this event is incorporated in Tracking Exercise/Torpedo Exercise Submarine	

A.1.6 ELECTRONIC WARFARE TRAINING

Electronic warfare is the mission area of naval warfare that aims to control use of the electromagnetic spectrum and to deny its use by an adversary. Typical electronic warfare activities include threat avoidance training, signals analysis for intelligence purposes, and use of airborne and surface electronic jamming devices to defeat tracking systems.

A.1.6.1 Electronic Warfare Operations

Activity Name	Activity Description	
Electronic Warfare		
Electronic Warfare Operations	Aircraft, surface vessel, and submarine personnel attempt to control portions of the electromagnetic spectrum used by enemy systems to degrade or deny the enemy's ability to take defensive actions.	
Long Description	Aircraft, surface ship, and submarine personnel attempt to control critical portions of the electromagnetic spectrum used by enemy systems to degrade or deny their ability to defend its forces from attack or recognize an emerging threat early enough to take defensive actions. Electronic Warfare Operations can be active or passive, offensive or defensive. Fixed-wing aircraft employ active jamming and deception against enemy search radars to mask the friendly inbound strike aircraft mission. Surface vessels and submarines detect and evaluate enemy electronic signals from enemy aircraft or missile radars, evaluate courses of action concerning the use of passive or active countermeasures, then use vessel maneuvers and either chaff, flares, active electronic countermeasures, or a combination of them to defeat the threat.	
Information Typical to the Event	**Platform:** Fixed and rotary-wing aircraft, surface combatant vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** Land based fixed/mobile threat emitters **Duration:** 1 to 2 hours	**Location:** Hawaii Operating Area Southern California Waters (Electronic Warfare Range)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	All chaff and flares involved in this event are covered under chaff exercise and flare exercises, respectively	

A.1.6.2 Counter Targeting Flare Exercise

Activity Name	Activity Description	
Electronic Warfare		
Counter Targeting-Flare Exercise	Fixed-winged aircraft and helicopters defend against an attack by deploying flares to disrupt threat infrared missile guidance systems.	
Long Description	Train fixed-winged aircraft and helicopter crews to deploy flares to disrupt threat infrared missile guidance systems to defend against an attack. Aircraft detect electronic targeting signals from threat radars or missiles or a threat missile plume when it is launched; dispense flares; and immediately maneuver to defeat the threat. This exercise trains aircraft personnel in the use of defensive flares designed to confuse infrared sensors or infrared homing missiles, thereby causing the sensor or missile to lock onto the flares instead of the real aircraft. Typically an aircraft will expend five flares in an exercise while operating above 3,000 ft. Flare exercises are often conducted with chaff exercises, rather than as a stand-alone exercise. Pyrotechnics are used on the range to simulate missile firings.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft, rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** Flares and pyrotechnics **Targets:** None **Duration:** 1 to 2 hours	**Location:** Hawaii Operating Area Southern California Waters (Electronic Warfare Range)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft Noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** Expended components of flares (pistons)	
Detailed Military Expended Material Information	Flares and residuals from pyrotechnics	
Assumptions used for Analysis	Approximately five flares per aircraft	

A.1.6.3 Counter Targeting Chaff Exercise – Ship

Activity Name	Activity Description	
Electronic Warfare		
Counter Targeting Chaff Exercise – Ship	Surface vessel crews defend against an attack by deploying chaff, a radar reflective material, which disrupt threat targeting and missile guidance radars.	
Long Description	Surface vessel crews deploy chaff to disrupt threat targeting and missile guidance radars to defend against an attack. Surface vessel crews detect electronic targeting signals from threat radars or missiles, dispense chaff, and immediately maneuver to defeat the threat. The chaff cloud deceives the inbound missile, and the vessel clears away from the threat. Chaff is a radar reflector material made of thin, narrow, metallic strips cut in various lengths to elicit frequency responses, which deceive enemy radars. Chaff is employed create a target from the chaff that will lure enemy radar and weapons system away from the actual friendly platform. Ships may also train with advanced countermeasure systems, such as the MK 53 Decoy Launching System (Nulka).	
Information Typical to the Event	**Platform:** Surface vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** MK 53 expendable decoys **Duration:** 1.5 hours	**Location:** Hawaii Operating Area Southern California Waters (Electronic Warfare Range)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** Expended components of chaff (end caps, pistons, chaff)	
Detailed Military Expended Material Information	Chaff canisters Expended components of chaff (end caps, pistons, chaff) MK 53 expendable decoys	
Assumptions used for Analysis	None	

A.1.6.4 Counter Targeting Chaff Exercise – Aircraft

Activity Name	Activity Description	
Electronic Warfare		
Counter Targeting Chaff Exercise – Aircraft	Fixed-winged aircraft and helicopter crews defend against an attack by deploying chaff, a radar reflective material, which disrupt threat targeting and missile guidance radars.	
Long Description	Fixed-winged aircraft and helicopter crews deploy chaff to disrupt threat targeting and missile guidance radars and to defend against an attack. Fixed-winged aircraft and helicopter crews detect electronic targeting signals from threat radars or missiles, dispense chaff, and immediately maneuver to defeat the threat. The chaff cloud deceives the inbound missile and the aircraft clears away from the threat. Chaff is a radar reflector material made of thin, narrow, metallic strips cut in various lengths used to lure an enemy radar and weapons system away from the actual friendly platform.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft, rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 1.5 hours	**Location:** Hawaii Operating Area Southern California Waters (Electronic Warfare Range)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** Expended components of chaff (end caps, pistons, chaff)	
Detailed Military Expended Material Information	Chaff cartridges Plastic end caps Pistons	
Assumptions used for Analysis	Chaff is usually expended while conducting other training activities, such as air combat maneuvering	

A.1.7 MINE WARFARE TRAINING

Mine warfare training is the naval warfare area involving the detection, avoidance, and neutralization of mines to protect Navy ships and submarines, and offensive mine laying in naval operations. A naval mine is a self-contained explosive device placed in water to destroy ships or submarines. Naval mines are deposited and left in place until triggered by the approach of, or a contact with an enemy ship, or are destroyed or removed. Naval mines can be laid by purpose-built minelayers, other ships, submarines, or airplanes. Mine warfare training includes mine countermeasures exercises and mine laying exercises.

A.1.7.1 Mine Countermeasure Exercise – Ship Sonar

Activity Name	Activity Description	
Mine Warfare		
Mine Countermeasure Exercise – Ship Sonar	Surface vessel crews detect and avoid mines while navigating restricted areas or channels using active sonar.	
Long Description	Surface vessel crews detect and avoid mines or other underwater hazardous objects while navigating restricted areas or channels using active sonar. Littoral Combat Ship utilizes unmanned surface vehicles and remotely operated vehicles to tow mine detection (hunting) equipment. Systems will operate from shallow zone greater than 40 ft. to deep water. Events could be embedded in major training events.	
Information Typical to the Event	**Platform:** Surface combatant vessels (e.g., Littoral Combat Ships), unmanned surface vehicles **Systems:** AN/AQS-20, Remote Mine hunting System, AN/AQS-24, SQS-53 and SQS-56 **Ordnance/Munitions:** None **Targets:** Minefields, Temporary placed mine (training to deploy or operate gear) **Duration:** 1.5 to 4 hours	**Location:** Hawaii Range Complex: Hawaii Operating Area, Kingfisher, Shallow-water Minefield Sonar Training Area Southern California Range Complex: Kingfisher, Shallow Water Training Range -Offshore or Shallow Water Minefield
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonar and other acoustic sources (MF1K, MF2K HF4) vessel noise **Energy:** Sub-surface laser imaging **Physical Disturbance and Strike:** Vessel and in-water device strike, seafloor device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None anticipated Temporary placed mines will be recovered	
Assumptions used for Analysis	No explosives used Constraints: Assume system will be operated in areas free of obstructions, and will be towed well above the seafloor. Towed system will be operated in a manner to avoid entanglement and damage. Events will take place in water depths 40 ft. and greater Existing placed mineshapes to be used. Potential for temporary placement of mineshapes	

A.1.7.2 Mine Countermeasure Exercise – Surface

Activity Name	Activity Description	
Mine Warfare		
Mine Countermeasure Exercise – Surface	Mine countermeasure ship crews detect, locate, identify, and avoid mines while navigating restricted areas or channels, such as while entering or leaving port.	
Long Description	This event trains mine countermeasure ship crews to detect mines for future neutralization or to alert other ships. Training utilizes simulated minefields constructed of moored or bottom mines, or instrumented mines that can record effectiveness of mine detection efforts. Ships will accurately fix their position while navigating through the restricted mine threat area at slow speeds of about 5 to 10 knots or less, while using active sonar to search the area ahead of the ship for moored mines or other hazards of navigation.	
Information Typical to the Event	**Platform:** Surface combatant vessel **Systems:** Sonar (e.g., AN/SQQ-32) **Ordnance/Munitions:** None **Targets:** None **Duration:** The exercise may last as long as 15 hours	**Location:** Southern California Range Complex: Kingfisher, Shallow Water Training Range-Offshore, Shallow Water Minefield, Silver Strand Training Complex, Camp Pendleton Amphibious Assault Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mine detection sonar (HF4), vessel noise **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.7.3 Mine Neutralization – Explosive Ordnance Disposal

Activity Name	Activity Description	
Mine Warfare		
Mine Neutralization – Explosive Ordnance Disposal	Personnel disable threat mines. Explosive charges are used.	
Long Description	Navy divers, typically explosive ordnance disposal personnel, disable threat mines with explosive charges to create a safe channel for friendly vessels to transit. Personnel detect, identify, evaluate, and neutralize mines in the water with an explosive device and may involve detonation of one or more explosive charges from 10 to 60 pounds of TNT equivalent. These operations are normally conducted during daylight hours for safety reasons. Time delay fuses may be used for these events.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, small boats **Systems:** None **Ordnance/Munitions:** Underwater detonation charges **Targets:** Minefields **Duration:** Up to 4 hours	**Location:** Hawaii Range Complex: Puuloa Underwater Range, Marine Corps Base Hawaii, Marine Corps Training Area Bellows, Barbers Point Underwater Range, Naval Inactive Ship Maintenance Facility, Lima Landing, Ewa Training Minefield Southern California Range Complex: Northwest Harbor, Horse Beach Cove, Southern California Anti-submarine Warfare Range, Shallow Water Training Range, in Special Warfare Training Area, Offshore waters Silver Strand Training Complex: Boat Lanes 1–14
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E1, E4, E5, E6, E7, E8), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only), seafloor device strike **Entanglement:** None **Ingestion:** Target fragments	
Detailed Military Expended Material Information	Target fragments; mooring blocks	
Assumptions used for Analysis	Time delayed fuses may be used (up to 15 minutes). Charge placed anywhere in water column, including bottom Mine shapes will be recovered	

A.1.7.4 Mine Countermeasure – Towed Mine Neutralization

Activity Name	Activity Description	
Mine Warfare		
Mine Countermeasures – Towed Mine Neutralization	Helicopter aircrews employ towed mine neutralization systems (e.g. Organic Airborne and Surface Influence Sweep [OASIS], MK-103/104/105)	
Long Description	Naval helicopters use towed devices to clear minefields by triggering mines that sense and explode when they detect ships/submarines by engine/propeller sounds or magnetic (steel construction) signature. Towed devices can also employ cable cutters to detach floating moored mines. Training will either be conducted against non-explosive training mineshapes, or, without any mineshapes. A high degree of pilot skill is required in deploying devices, safely towing them at relatively low speeds and altitudes, and then recovering devices. Devices used include the following: Organic Airborne and Surface Influence Sweep (OASIS). The Organic Airborne and Surface Influence Sweep is a towed device that imitates the magnetic and acoustic signatures of naval ships and submarines. MK 105 sled: the MK 105 sled, similar to the Organic Airborne and Surface Influence Sweep, creates a magnetic field used to trigger mines. The MK 105 sled can also be used in conjunction with the MK 103 cable cutter system and the MK 104 acoustic countermeasure. AN/SPU-1/W "Magnetic Orange Pipe": As the name implies, the AN/SPU-1/W is a magnetic pipe that is used to trigger magnetically influenced mines.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., Littoral Combat Ship), unmanned surface vehicle, unmanned underwater vehicles, rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** Cable cutters (MK-103) **Targets:** Existing minefields, temporary placed mines, or no targets (training to deploy/operate gear) **Duration:** Typically 1.5 hours, up to 4 hours	**Location:** Southern California Range Complex: Pyramid Cove, Northwest Harbor, Kingfisher Training Range, Mine Training Range-1/2, Shallow Water Minefield, Helicopter Offshore Training Area, Camp Pendleton Amphibious Assault Area All Silver Strand Training Complex Boat Lanes 1–14, in water greater than 40 ft. deep
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** Electromagnetics **Physical Disturbance and Strike:** Vessel and in-water device strike, seafloor device strike (bottom placed mine shapes) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Mooring blocks	
Assumptions used for Analysis	Towed from helicopters, ships, unmanned surface vehicles and unmanned underwater vehicles. Mechanical sweeping (cable cutting), acoustic, and magnetic influence sweeping. Cable cutters utilize an insignificant charge (similar to shotgun shell). Acoustic sweeps generate ship type noise via mechanical system. Towing systems though minefields (or without mines, to train to deploy, tow, and recover). May involve instrumented mines (VIMS).	

A.1.7.5 Airborne Mine Countermeasure – Mine Detection

Activity Name	Activity Description	
Mine Warfare		
Airborne Mine Countermeasure – Mine Detection	Vessel crews and helicopter aircrews detect mines using towed or laser mine detection systems (e.g., AN/AQS-20, Airborne Laser Mine Detection System).	
Long Description	Helicopter crews use towed and airborne devices to detect, locate, and classify potential mines. Towed devices employ active acoustic sources, such as high frequency and side scanning sonar. These devices are similar in function to systems used to map the seafloor or locate submerged structures or items. Airborne devices utilize laser systems to locate mines located below the surface. Devices used include the AN/AQS-20/A, towed minehunting sonar used to detect and classify bottom and floating/moored mines in deep and shallow water, and the Airborne Laser Mine Detection System, developed to detect and classify floating and near-surface, moored mines.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, Unmanned surface vehicles, Unmanned underwater vehicles **Systems:** Airborne Laser Mine Detection System (AN/AQS-20A, AN/AQS-24A) **Ordnance/Munitions:** None **Targets:** Existing minefields, temporary placed mines, or no targets (training to deploy/operate gear) **Duration:** Typically 1.5 hours, up to 4 hours	**Location:** Southern California Range Complex: Pyramid cove, Northwest Harbor, Kingfisher Training Range, Mine Training Range-1/2, Shallow Water Minefield, Helicopter Offshore Training Area, Camp Pendleton Amphibious Assault Area Silver Strand Training Complex: Boat Lanes 1–14, in water greater than 40 ft. deep
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mine detection sonar (HF4), vessel noise, aircraft noise **Energy:** In-air low energy laser **Physical Disturbance and Strike:** Vessel and in-water device strike, aircraft strike (birds only), seafloor device strike (bottom placed mine shapes) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Sonar mine detection systems towed from helicopters, vessels, unmanned surface vehicles Use of airborne laser systems to detect mine shapes Laser systems similar to commercial Light Detection And Ranging (LIDAR) systems Mine shapes will be recovered	

A.1.7.6 Mine Countermeasure – Mine Neutralization

Activity Name	Activity Description	
Mine Warfare		
Mine Countermeasure (MCM) – Mine Neutralization	Vessel crews or helicopter aircrews disable mines by firing small- and medium-caliber projectiles.	
Long Description	Vessel and helicopter crews utilize small- and medium- caliber weapons to neutralize potential mines. Weapons may employ laser detection and targeting systems. Small- and medium- caliper projectiles are non-explosive, and neutralize mines by breaching casing, causing the mine to flood or detonate.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, surface combatant vessels **Systems:** None **Ordnance/Munitions:** Small-caliber and medium-caliber (non-explosive) **Targets:** Existing minefields, Temporarily placed mines **Duration:** Typically 1.5 hours, up to 4 hours	**Location:** Southern California Range Complex: Pyramid cove, Northwest Harbor, Kingfisher Training Range, Mine Training Range-1/2, Shallow Water Minefield
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** In-air low energy laser **Physical Disturbance and Strike:** Vessel and in-water device strike; military expended material strike (projectiles); seafloor device strike (bottom placed mine shapes); aircraft strike (birds only) **Entanglement:** None **Ingestion:** Small- and medium-caliber projectiles, Casings	
Detailed Military Expended Material Information	Small- and medium-caliber projectiles Casings	
Assumptions used for Analysis	None	

A.1.7.7 Mine Neutralization – Remotely Operated Vehicle

Activity Name	Activity Description	
Mine Warfare		
Mine Countermeasures – Mine Neutralization – Remotely Operated Vehicles	Vessel crews or helicopter aircrews disable mines using remotely operated underwater vehicles.	
Long Description	Vessel and helicopter crews utilize remotely operated vehicles to neutralize potential mines. Remotely operated vehicles will use sonar and optical systems to locate and target mine shapes. Explosive mine neutralizers may be used during live fire events.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, surface combatant vessels **Systems:** Acoustic mine targeting system **Ordnance/Munitions:** High explosive neutralizers (possibly) **Targets:** Existing minefields, temporary placed mines **Duration:** Typically 1.5 hours, up to 4 hours	**Location:** Southern California Range Complex: Kingfisher, Shallow Water Training Range-Offshore, Shallow Water Minefield, Camp Pendleton Amphibious Assault Area Silver Strand Training Complex: Boat Lanes 1–14; Breakers Beach, Delta I, II, and Delta North, Echo
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E4), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, sea floor device strike (bottom placed mine shapes), aircraft strike (birds only) **Entanglement:** Fiber optic cable **Ingestion:** Neutralizer fragments	
Detailed Military Expended Material Information	Neutralizer fragments Fiber optic cables	
Assumptions used for Analysis	Acoustic sources associated with remotely operated vehicle mine neutralization systems do not require quantitative analysis. See Section 2.3.7.2.	

A.1.7.8 Mine Laying

Activity Name	Activity Description	
Mine Warfare		
Mine Laying	Fixed-winged aircraft and submarine crews drop or launch non-explosive mine shapes.	
Long Description	Fixed-winged aircraft and submarine crews lay offensive or defensive mines for a tactical advantage for friendly forces. Fixed-winged aircraft lay a precise minefield pattern for specific tactical situations. The aircrew typically makes multiple passes in the same flight pattern, and drops one or more training shapes (four shapes total). Training shapes are non-explosive and are recovered when possible.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., F/A-18, P-3, P-8, F-35, B-52, B1B) **Systems:** None **Ordnance/Munitions:** Non-explosive mine shapes, "Quick-strike" mines **Targets:** None **Duration:** 1 hour	**Location:** Hawaii Range Complex: R-3101 Southern California Range Complex: Mine Training Range, Shallow Water Training Ranges, Pyramid Cove, China Point
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive mine shapes), aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Non-explosive mine shapes	
Assumptions used for Analysis	Similar to non-explosive bombing exercise These events primarily occur during major training exercises While mineshapes will be recovered if possible, assume they will not for the analysis Mine laying will take place in waters less than 100 ft. Assume 12 mineshapes used per event	

A.1.7.9 Marine Mammal System

Activity Name	Activity Description	
Mine Warfare		
Marine Mammal Systems Operations	Navy personnel and Navy marine mammals work together to detect specified underwater objects.	
Long Description	The Navy deploys trained bottlenose dolphins (*Tursiops trucatus)* and California sea lions (*Zalophus californianus*) as part of the marine mammal mine-hunting and object-recovery system. Each system consists of a motorized small craft, several crewmembers and a trained dolphin or sea lion. Self-Contained Underwater Breathing Apparatus (SCUBA) assisted personnel and Navy marine mammals work together to detect specified underwater objects. Personnel work with the help of marine mammals to detect underwater objects. Approximately 10 percent of training involves the setting of a 13 or 29 lb. (5.9- or 13-kilogram) Net Explosive Weight charge to detonate the objects.	
Information Typical to the Event	**Platform:** Small boats **Systems:** None **Ordnance/Munitions:** 13- or 29-lb. Net Explosive Weight Charge **Targets:** None **Duration:** Varies	**Location:** Hawaii Range Complex: Hawaii Operating Area, Kingfisher, Shallow Waters Minefield, Sonar Training Area Silver Strand Training Complex: Boat Lanes 1–14; Breakers Beach
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E6, E7), vessel noise **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Minimal mine detonation residue (only during the 10 percent of training that includes an explosive charge)	
Assumptions used for Analysis	Sequential detonations at water depths of 10 to 72 ft. (3 to 22 m) and are bottom laid. Single charges are laid within water depths of 24 to 72 ft. (7 to 22 m), 20 ft. (6 m) from the surface or below.	

A.1.7.10 Shock Wave Action Generator

Activity Name	Activity Description	
Mine Warfare (MIW)		
Shock Wave Action Generator	Navy divers place a small charge on a simulated underwater mine.	
Long Description	For shock wave action generator training, a metal sheet containing a non-explosive limpet mine is lowered into the water, sometimes from the side of a small vessel, such as an LCM-8 craft. Divers place a single shock wave generator on the mine that is located mid-water column, within water depths of 10 to 20 ft. (3 to 6 m). A bag is placed over the mine to catch falling debris.	
Information Typical to the Event	**Platform:** None **Systems:** None **Ordnance/Munitions:** One 15 gram explosive charge **Targets:** Metal sheet with limpet mine **Duration:** 2 hours	**Location:** Silver Strand Training Complex: Boat Lanes 1–14; San Diego Bay-Echo
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives, vessel noise **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** Mine detonation residue	
Detailed Military Expended Material Information	Minimal mine detonation residue (most materials are recovered after each event)	
Assumptions Used for Analysis	None	

A.1.7.11 Surf Zone Test Detachment/Equipment Test and Evaluation

Activity Name	Activity Description	
Mine Warfare (MIW)		
Surf Zone Test Detachment/Equipment Test and Evaluation	Navy personnel test and evaluate the effectiveness of new detection and neutralization equipment designated for surf conditions.	
Long Description	Navy personnel test and evaluate the effectiveness of new detection and neutralization equipment designated for surf conditions. To support clearance capability in the surf zone (out to 10 ft. [3 m] of water), Explosive Ordnance Disposal personnel would test and evaluate the effectiveness of new detection and neutralization equipment designated for surf conditions. Use of explosives will occur during 1 percent of training activities (0.1 to 29 lb. [.045 to 9 kg] Net Explosive Weight) and will only occur in the Silver Strand Training Complex Boat Lanes. Time delay fuses may be used for these events.	
Information Typical to the Event	**Platform:** None **Systems:** Hand-held sonar systems **Ordnance/Munitions:** Explosive charges **Targets:** Simulated mines **Duration:** 3 hours	**Location:** Silver Strand Training Complex: Boat Lanes 1–14; San Diego Bay-Echo
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Hand-held sonar systems (HHS1) and explosives (E7) **Energy:** None **Physical Disturbance and Strike:** None. **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Minimal mine detonation residue (only during the 1 percent of training that includes an explosive charge)	
Assumptions Used for Analysis	None	

A.1.7.12 Submarine Mine Exercise

Activity Name	Activity Description	
Mine Warfare (MIW)		
Submarine Mine Exercise	Submarine crews practice detecting mines in a designated area.	
Long Description	Submarine crews use active sonar to detect and avoid mines or other underwater hazardous objects, while navigating restricted areas or channels, such as while entering or leaving port. This event trains submarine crews to detect and avoid mines. Training utilizes simulated minefields constructed of moored or bottom mines, or instrumented mines that can record effectiveness of mine detection efforts. In a typical training exercise, submarine crews will use the AN/BQS-15 high-frequency active sonar to locate and avoid the mine shapes. Each mine avoidance exercise involves one submarine operating the AN/BQS-15 sonar for 6 hours to navigate through the training minefield. During mine warfare exercises submarines will expend several submarine-launched expendable bathythermographs to determine water conditions affecting sonar performance.	
Information Typical to the Event	**Platform:** Submarine **Systems:** Sonar (AN/BQS-15) **Ordnance/Munitions:** None **Targets:** Mine shapes **Duration:** 6 hours	**Location:** Hawaii Operating Area, Kahoolawe Submarine Training Minefield Advanced Research Projects Agency Training Minefield, Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g., AN/BQS-15) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.1.7.13 Civilian Port Defense

Activity Name	Activity Description	
Mine Warfare		
Civilian Port Defense	Maritime security activities for military and civilian ports and harbors.	
Long Description	Naval forces provide Mine Warfare capabilities to Department of Homeland Security led event. The three pillars of Mine Warfare, Airborne (helicopter), Surface (ships and unmanned vehicles), and Undersea (divers, marine mammals, and unmanned vehicles) mine countermeasures will be brought to bear in order to ensure strategic U.S. ports remain free of mine threats. Various Mine Warfare sensors, which utilize active acoustics, will be employed in the detection, classification, and neutralization of mines. Along with traditional Mine Warfare techniques, such as helicopter towed mine countermeasures, new technologies (unmanned vehicles) will be utilized. Event locations and scenarios will vary according to Department of Homeland Security strategic goals and evolving world events. Purpose of HSTT analysis is to ensure adequate Marine Mammal Protection Act (MMPA) authorizations are in place to support the use of acoustic mine detection sensors. Additional analysis and regulatory engagement will be conducted as appropriate as planning for the actual events begin.	
Information Typical to the Event	**Platform:** Surface combatant vessels, Small boats, Rotary-wing aircraft **Systems:** Unmanned underwater and surface vehicles, various mine detection sensors **Ordnance/Munitions:** High explosive charges **Targets:** Temporary mineshapes **Duration:** Multiple days	**Location:** San Diego Bay Pearl Harbor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonar ([HF4] e.g., AN/AQS-20, AN/AQS-24), underwater explosives (E2, E4); vessel noise; aircraft noise **Energy:** Electromagnetic (magnetic influence mine sweeping) **Physical Disturbance and Strike:** Vessel and in-water device strikes; seafloor device strike (bottom placed mine shapes); aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Non-permanent mine shapes will be laid in various places on the bottom of San Diego Bay. Shapes are varied, from about 1 m circular to about 2.5 m long by 1 m wide. They will be recovered using normal assets, with diver involvement. Programmatic analysis for acoustic effects only. While goal is to conduct once per year, alternating east/west coast, assume that a West Coast event will occur every year with a total of three per five year period.	

A.1.8 NAVAL SPECIAL WARFARE TRAINING

Naval special warfare and other Navy forces train to conduct military operations in five Special Operations mission areas: unconventional warfare, direct action, special reconnaissance, foreign internal defense, and counterterrorism. Naval special warfare training involves specialized tactics, techniques, and procedures, employed in training events that include: insertion/extraction operations using parachutes rubber boats, or helicopters; boat-to-shore and boat-to-boat gunnery; underwater demolition training; reconnaissance; and small arms training.

A.1.8.1 Personnel Insertion/Extraction – Non-Submarine

Activity Name	Activity Description	
Naval Special Warfare		
Personnel Insertion/Extraction – Non-Submarine	Personnel train to approach or depart an objective area using various transportation methods and tactics.	
Long Description	Personnel train to approach or depart an objective area using various transportation methods and tactics. These activities train forces to insert and extract personnel and equipment day or night. Tactics and techniques employed include insertion from aircraft by parachute, by rope, or from low, slow-flying helicopters from which personnel jump into the water. Parachute training is required to be conducted on surveyed drop zones to enhance safety. Insertion and extraction methods also employ small inflatable boats.	
Information Typical to the Event	**Platform:** Fixed and rotary-wing aircraft **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 2 to 8 hours	**Location:** Southern California Range Complex: Southern California Operating Area, San Clemente Island Silver Strand Training Complex: Boat Lanes 1–14, Echo
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.1.8.2 Personnel Insertion/Extraction – Submarine

Activity Name	Activity Description	
Naval Special Warfare		
Personnel Insertion/Extraction - Submarine	Military personnel train for covert insertion and extraction into target areas using submarines.	
Long Description	Military personnel train for covert insertion and extraction into target areas using submarines. Often, an undersea delivery vehicle, similar to a "mini-sub" may be used to transfer the personnel from the submarine to their objective near shore. Several methods are used by submarines and embarked personnel to move from the submarine to the objective area: • The lock-in/lock-out procedure allows personnel to swim out of submerged submarines. • The Sea, Air, Land (SEAL) Delivery Vehicle may be used by Naval Special Warfare personnel to move from the submarine to an underwater area closer to shore. Submarines approach a hostile area and move at a very slow speed while inserting or extracting Naval Special Warfare or other personnel by using one, or a combination of the procedures discussed above. Once the personnel have inserted or extracted, the submarine will leave the area. Opposition force personnel may be employed as well as small arms with blanks or live ammunition once the personnel reach the beach area. These operations will vary in length depending on the transportation method and systems being used. Training may include navigation runs into and out of the San Diego Bay or Pearl Harbor that may be conducted in coordination with other training activities.	
Information Typical to the Event	**Platform:** Sea, Air, Land Delivery Vehicle **Systems:** None **Ordnance/Munitions:** None (if used, small-caliber) **Targets:** None **Duration:** 2 to 8 hours	**Location:** Hawaii Range Complex: Hawaii Operating Area, Marine Corps Training Area Bellows; Pacific Missile Range Facility (Main Base) Silver Strand Training Complex: Boat Lanes 1-10, Delta III, Echo, Foxtrot, Golf, Hotel
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Small-caliber projectiles, if used	
Assumptions Used for Analysis	None	

A.1.8.3 Underwater Demolition Multiple Charge – Mat Weave and Obstacle Loading

Activity Name	Activity Description	
Naval Special Warfare		
Underwater Demolitions Multiple Charge-Mat Weave and Obstacle Loading	Military personnel use explosive charges to destroy barriers or obstacles to amphibious vehicle access to beach areas.	
Long Description	Navy personnel train to construct, place, and safely detonate multiple charges laid in a pattern for underwater obstacle clearance. Naval Special Warfare or Explosive Ordnance Disposal personnel locate barriers or obstacles designed to block amphibious vehicle access to beach areas, then use explosive charges to destroy them. Pattern charges (mat weaves) may use as much as 500 lb. (227 kg) of high explosive. Time delay fuses may be used for these events.	
Information Typical to the Event	**Platform:** Small boats **Systems:** None **Ordnance/Munitions:** High-explosive charges (up to 500 lb.) **Targets:** None **Duration:** Varies	**Location:** Southern California Range Complex: Northwest Harbor (Training Areas and Ranges 2 and 3), Special Warfare Training Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E9) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Minimal mine detonation residue (most materials are recovered after each event)	
Assumptions Used for Analysis	None	

A.1.8.4 Underwater Demolition Qualification/Certification

Activity Name	Activity Description	
Naval Special Warfare		
Underwater Demolition Qualification/Certification	Navy divers conduct training and certification in placing underwater demolition charges.	
Long Description	Demolition re-qualifications and training provides teams with experience in underwater detonations by conducting detonations on metal plates near the shoreline. At water depths of 10 to 72 ft. (3 to 22 m), two sequential 12.5 to 13.75 lb. (5.7 to 6.2 kg) Net Explosive Weight charges are placed on the bottom or a single 25.5 lb. (11.5 kilogram) charge is placed from a depth of 20 ft. (6 m) to the bottom.	
Information Typical to the Event	**Platform:** Small boats **Systems:** None **Ordnance/Munitions:** High-explosive charges (up to 29 lb.) **Targets:** None **Duration:** Varies	**Location:** Southern California Range Complex Silver Strand Training Complex: Boat and Beach Lanes 1–14
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E7) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Minimal mine detonation residue (most materials are recovered after each event)	
Assumptions Used for Analysis	None	

A.1.9 OTHER TRAINING

A.1.9.1 Precision Anchoring

Activity Name	Activity Description	
Other Training		
Precision Anchoring	Releasing of anchors in designated locations.	
Long Description	Vessels navigate to a pre-planned position and deploy the anchor. The vessel uses all means available to determine its position when anchor is dropped to demonstrate calculating and plotting the anchor's position within 100 yards of center of planned anchorage.	
Information Typical to the Event	**Platform:** All surface vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 1 hour	**Location:** Hawaii Range Complex: Pearl Harbor Defense Sea Area Silver Strand Training Complex: Anchorages
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike, seafloor device strike (anchor) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.9.2 Small Boat Attack

Activity Name	Activity Description	
Other		
Small Boat Attack	Small attacks are conducted on boats. For this activity, one or two small boats or personal watercraft conduct attack activities on units afloat.	
Long Description	Small attacks are conducted on boats, usually within anchorages or boat lanes. For this activity, one or two small boats or personal watercraft conduct attack activities on units afloat, firing blank small-caliber rounds. The activity will usually include observers.	
Information Typical to the Event	**Platform:** Small boats or watercraft **Systems:** **Ordnance/Munitions:** Small caliber (non-explosive) **Targets:** High-performance small boats and unmanned vehicles **Duration:** Varies	**Location:** Hawaii Operating Areas Silver Strand Training Complex: Boat Lanes 1-10
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike, military expended material strike (non-explosive projectiles) **Entanglement:** None **Ingestion:** Small-caliber projectiles	
Detailed Military Expended Material Information	Small-caliber projectiles	
Assumptions used for Analysis	None	

A.1.9.3 Offshore Petroleum Discharge System

Activity Name	Activity Description	
Other		
Offshore Petroleum Discharge System	This activity trains personnel in the transfer of petroleum (though only sea water is used during training) from ship to shore.	
Long Description	Offshore petroleum discharge system training consists of five training subcomponents including the beach termination unit; operation utility boat technicians; boat coxswain; dive boat operation technician; and single anchor leg moor training. This activity trains personnel in the transfer of petroleum (though only sea water is used during training) from ship to shore. From approximately one mile offshore, technicians and underwater construction team divers roll out conduit from a ship offshore, deploy the single anchor leg mooring which sinks to and settles on the ocean floor, and use anchors at various points along the conduit to secure it to the seafloor. The conduit terminates at the shore location of the termination unit manifold. The current training at Silver Strand Training Complex consists of rolling out a four mile fluid-transfer conduit from the beach out to approximately one mile offshore and anchoring it to the seafloor with a Single Anchor Leg Moor. The improved offshore petroleum discharge system would have a self-sinking hose that could extend up to eight miles offshore, but like the current system, would still be rolled out to approximately one mile offshore during training activities at Silver Strand Training Complex.	
Information Typical to the Event	**Platform:** Surface combatant vessels, small boats, support craft/other **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Varies	**Location:** Silver Strand Training Complex: Boat Lanes 1-10, Bravo, Waters outside of boat lanes
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.1.9.4 Elevated Causeway System

Activity Name	Activity Description	
Other		
Elevated causeway System	A temporary pier is constructed off of the beach. Piles are driven into the sand and then later removed.	
Long Description	A pier is constructed off of the beach. The pier is designed to allow for offload of materials and equipment from supply ships. Piles are driven into the sand with an impact hammer. Causeway platforms are then hoisted and secured onto the piles with hydraulic jacks and cranes. It is assembled by joining standard causeway sections together and can be assembled in 10 days. The pier, including associated piles, is removed at the conclusion of training.	
Information Typical to the Event	**Platform:** Support craft/other **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 10 days for assembly	**Location:** Silver Strand Training Complex: Boat Lanes 1-10, Designated Bravo Beach training lane; Camp Pendleton Amphibious Assault Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Pile driving and removal **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Programmatic analysis (only assessing acoustic impacts from the pile driving)	

A.1.9.5 Submarine Navigation

Activity Name	Activity Description	
Other		
Submarine Navigational	Submarine crews operate sonar for navigation and object detection while transiting in and out of port during reduced visibility.	
Long Description	Submarine crews train to operate sonar for navigation. The ability to navigate using sonar is critical for object detection while transiting in and out of port during periods of reduced visibility. Submarine Navigation training activities conducted while transiting in and out of port are done so while surfaced, with bridge watches and a single lookout.	
Information Typical to the Event	**Platform:** Submarines **Systems:** High frequency submarine sonar system **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 2 hours	**Location:** Hawaii Range Complex: Pearl Harbor Channel and virtual channel south of Pearl Harbor Southern California Range Complex: Naval Base Point Loma and seaward virtual channel
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High frequency submarine sonar system (HF1); hull-mounted sonar (MF3) **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.9.6 Submarine Under Ice Certification

Activity Name	Activity Description	
Other		
Submarine Under Ice Certification	Submarine crews train to operate under ice. Ice conditions are simulated during training and certification events.	
Long Description	Submarine crews train to operate under ice. Ice conditions are simulated during training and certification events.	
Information Typical to the Event	**Platform:** Submarine **Systems:** Submarine high frequency sources **Ordnance/Munitions:** None **Targets:** None **Duration:** A single exercise is comprised of 36 hours of training, spread out over 6 days in 6-hour training sessions.	**Location:** Hawaii Operating Areas Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High–frequency submarine sonar (HF1) **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.9.7 Salvage Operations

Activity Name	Activity Description	
Other		
Salvage Operations	Navy divers train to tow disabled ships, repair damaged ships, remove sunken ships, and conduct deep ocean recovery.	
Long Description	Navy divers train to tow disabled ships, repair damaged ships, remove sunken ships, and conduct deep ocean recovery. The Navy's Mobile Diving and Salvage Unit One and divers from other countries practice swift and mobile ship and barge salvage, towing, battle damage repair, deep ocean recovery, harbor clearance, removal of objects from navigable waters, and underwater ship repair capabilities.	
Information Typical to the Event	**Platform:** Surface vessels, other support vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Varies	**Location:** Hawaii Range Complex: Puuloa Underwater Range, Pearl Harbor Defensive Sea Area, Keehi Lagoon, Pearl Harbor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.9.8 Surface Ship Sonar Maintenance

Activity Name	Activity Description	
Other		
Surface Ship Sonar Maintenance	Pierside and at-sea maintenance of sonar systems.	
Long Description	This scenario consists of surface combatant vessels performing periodic maintenance to the hull mounted sonar systems while in port or at sea. This maintenance takes up to four hours. Surface vessels operate active sonar systems for maintenance while in shallow water near their homeport, however, sonar maintenance could occur anywhere as the system's performance may warrant.	
Information Typical to the Event	**Platform:** Surface combatant vessels **Systems:** Hull mounted sonar systems **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 4 hours	**Location:** Hawaii Range Complex: Hawaii Operating Area; Pearl Harbor; Fleet Operational Readiness Accuracy Check Site Range Southern California Range Complex: Southern California Operating Area; San Diego Bay and ports HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency hull mounted sonar (MF1, MF2), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.9.9 Submarine Sonar Maintenance

Activity Name	Activity Description	
Other-Maintenance		
Submarine Sonar Maintenance	Pierside and at-sea maintenance of sonar systems.	
Long Description	A submarine performs periodic maintenance on the AN/BQQ-10 sonar system while in port or at sea. Submarines conduct maintenance to their sonar systems in shallow water near their homeport; however, sonar maintenance could occur anywhere as the system's performance may warrant	
Information Typical to the Event	**Platform:** Submarines **Systems:** High frequency submarine sonar system, **Ordnance/Munitions:** None **Targets:** None **Duration:** 45 minutes up to 1 hour	**Location:** Hawaii Range Complex: Hawaii Operating Area; Pearl Harbor; Fleet Operational Readiness Accuracy Check Site Range Southern California Range Complex: Southern California Operating Area ; San Diego Bay and ports HSTT Transit Corridor
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonar (submarine sonar, MF3) **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.1.10 INTEGRATED TRAINING AND MAJOR RANGE EVENTS

A major range event is comprised of several unit-level range operations conducted by several units operating together while commanded and controlled by a single commander. These exercises typically employ an exercise scenario developed to train and evaluate the Strike Group/Force in required naval tactical tasks. In a major range event, most of the operations and activities being directed and coordinated by the Strike Group commander are identical in nature to the operations conducted in the course in individual, crew, and smaller-unit training events. In a major range event, however, these disparate training tasks are conducted in concert, rather than in isolation.

A.1.10.1 Composite Training Unit Exercise

Activity Name	Activity Description	
Major Training Events		
Anti-Submarine Warfare for Composite Unit Training Exercise	Anti-submarine warfare activities conducted during a Composite Training Unit Exercise	
Long Description	Intermediate level battle group exercise designed to create a cohesive Strike Group prior to deployment or Joint Task Force Exercise. Typically seven surface ships, helicopters, maritime patrol aircraft, two submarines, and various unmanned vehicles. Each Strike Group performs a rehearsal called Composite Training Unit Exercise before deployment. Prior to the Composite Training Unit Exercise, each ship and aircraft in the strike group trains in their specialty. The Composite Training Unit Exercise is an intermediate-level strike group exercise designed to forge the group into a cohesive fighting team. Composite Training Unit Exercise is normally conducted during a 1 to 3 week period 6 to 8 weeks before Joint Task Force Exercise and consists of an 18 day schedule of event driven exercise, and a 3 day Final Battle Problem. The Composite Training Unit Exercise is an integration phase, at-sea, major range event. For the carrier strike group, this exercise integrates the aircraft carrier and carrier air wing with surface and submarine units in a challenging operational environment. For the expeditionary strike group/amphibious readiness group, this exercise integrates amphibious ships with their associated air wing, surface ships, submarines, and the Marine Expeditionary Unit. Live-fire operations that may take place during Composite Training Unit Exercise include long-range air strikes, Naval Surface Fire Support, and surface-to-air, surface-to-surface, and air-to-surface missile exercises. The Marine Expeditionary Unit also conducts realistic training based on anticipated operational requirements and to further develop the required coordination between Navy and Marine Corps forces. Special Operations training may also be integrated with the exercise scenario.	
Information Typical to the Event	**Platform:** Surface vessels, Fixed-wing aircraft, rotary-wing aircraft, unmanned vehicles, submarines **Systems:** All sonar systems **Ordnance/Munitions:** All ship and aircraft weapons, explosive sonobuoys may be used **Targets:** All surface, air, and anti-submarine warfare targets (e.g., MK-39 Expendable Mobile Anti-submarine Warfare Training Targets) **Duration:** 21 days	**Location:** Southern California Operating Area and Point Mugu Sea Range (overlap area only)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency hull-mounted sonar (MF1, MF2, MF3), helicopter dipping sonar (MF4), sonobuoy (MF5), high duty cycle variable depth sonar (MF12), multistatic active coherent sonobuoy (ASW2),mid-frequency acoustic countermeasure (ASW3, ASW4), signal devices (MF6), high-frequency hull-mounted sonar (HF1), explosive sonobuoys (E4); vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, vessel and in-water device strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes, countermeasures, sonobuoy fragments	
Detailed Military Expended Material Information	One MK-39 Expendable Mobile Anti-submarine Warfare Training Targets Air deployed sonobuoy will have a parachute Expended countermeasures	
Assumptions used for Analysis	For Composite Training Unit Exercise only the anti-submarine warfare activities were analyzed as a Composite Training Unit Exercise. Other warfare area training conducted during the Composite Training Unit Exercise was analyzed as unit level training (gunnery exercise, missile exercise, etc.)	

A.1.10.2 Joint Task Force Exercise/Sustainment Exercise

Activity Name	Activity Description	
Major Training Events		
Joint Task Force Exercise	Final Fleet exercise prior to deployment of the Strike Group. Serves as a ready-to-deploy certification for all units involved. Typically nine surface ships, helicopters, maritime patrol aircraft, two submarines, and various unmanned vehicles.	
Long Description	The Joint Task Force Exercise is a dynamic and complex major range event that is the culminating exercise in the Sustainment Phase training for the Carrier Strike Groups and Expeditionary Strike Groups. For an Expeditionary Strike Group, the exercise incorporates an Amphibious Ready Group Certification Exercise for the amphibious ships and a Special Operations Capable Certification for the Marine Expeditionary Unit. When schedules align, the Joint Task Force Exercise may be conducted concurrently for an Expeditionary Strike Group and Carrier Strike Group. Joint Task Force Exercise emphasizes mission planning and effective execution by all primary and support warfare commanders, including command and control, surveillance, intelligence, logistics support, and the integration of tactical fires. Joint Task Force Exercises are complex scenario-driven exercises that evaluate a strike group in all warfare areas. Joint Task Force Exercise is normally 10 days long, not including a 3-day in-port Force Protection Exercise, and is the final at-sea exercise for the Carrier Strike Group or Expeditionary Strike Group prior to deployment. Joint Task Force Exercise occurs 3 to 4 times per year.	
Information Typical to the Event	**Platform:** Multiple surface combatant vessels, Fixed-wing aircraft, Rotary-wing aircraft, unmanned vehicles, and submarines **Systems:** Anti-Submarine Warfare systems, Anti-Surface Warfare and Anti-Air Warfare gun and missile systems **Ordnance/Munitions:** Numerous gun rounds, bombs, and missiles, all captured in specific events **Targets:** MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30 Recoverable Training Target, submarine **Duration:** Up to 10 days	**Location:** Southern California Operating Area and Point Mugu Sea Range (overlap area only)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF1K, MF2, MF2K, MF3, MF4, MF5, MF6, ASW2, ASW3, ASW4,) high-frequency sonar (HF1), light and heavyweight torpedoes, (e.g., TORP1, TORP2), high-frequency acoustic modems, vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, aircraft strike, (birds only) military expended materials, seafloor device strike **Entanglement:** parachutes **Ingestion:** Parachutes, target and munitions fragments, small-caliber gun rounds, chaff	
Detailed Military Expended Material Information	Anti-Submarine Warfare target: One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) per event. If target is air-dropped, one parachute per target Target remnants, chaff, flares Sonobuoys: (one parachute for each sonobuoy) Large, medium, and small-caliber projectiles, bombs, missiles, rockets, expendable acoustic countermeasures	
Assumptions used for Analysis	All Military expended materials, ordnance, explosives, and sonar use is included in individual events	

A.1.10.3 Rim of the Pacific Exercise

<table>
<tr><th>Activity Name</th><th colspan="2">Activity Description</th></tr>
<tr><td colspan="3">Major Training Events</td></tr>
<tr><td>Rim of the Pacific Exercise</td><td colspan="2">A biennial multinational training exercise in which navies from Pacific Rim nations and the United Kingdom assemble in Pearl Harbor, Hawaii to conduct training in a number of warfare areas throughout the Hawaiian Islands. Marine mammal systems may be used during a Rim of the Pacific exercise. Components of Rim of the Pacific such as certain Mine Warfare training may be conducted in the Southern California Range Complex.</td></tr>
<tr><td>Long Description</td><td colspan="2">Rim of the Pacific is the world's largest multinational maritime exercise, typically lasting four to five weeks. Hosted by Commander, Pacific Fleet, the exercise is scheduled in the summer on even years.
Rim of the Pacific typically consists of 14 nations, 32 ships, 5 submarines, more than 170 aircraft, and 20,000 personnel.
The exercise typically consists of three major phases. Phase I, the Harbor Phase, will consist of operational planning meetings, safety briefings, and sporting events. This phase is designed to make final preparations for the at-sea phases of the exercises, as well as build on professional and personal relationships between the participating countries.
Phase II, the Operational Phase, is driven by a structured schedule of events. This portion may include live fire gunnery and missile exercises, maritime interdiction and vessel boarding, anti-surface warfare, undersea warfare, and naval maneuvers, air defense exercises, as well as, explosive ordnance disposal, diving and salvage operations, mine clearance operations, and an amphibious landing. This phase exercises the ability of each nation to conduct robust command and control operations with multinational players and enhances each unit's operational capabilities.
Phase III, the Tactical Phase of the exercise, is scenario-driven. The intense training during this phase allows participating nations to further strengthen their maritime skills and capabilities and improve their ability to communicate and operate in simulated hostile scenarios. This phase concludes with the ships' return to Pearl Harbor, where participating nations will reconvene to discuss the exercise and overall accomplishments.</td></tr>
<tr><td>Information Typical to the Event</td><td>Platform: Surface ships, Aircraft, Submarines
Systems: Anti-Submarine Warfare systems, Anti-Surface Warfare and Anti-Air Warfare gun and missile systems
Ordnance/Munitions: Numerous gun rounds, bombs, and missiles, all captured in specific events
Targets: MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30 Recoverable Training Target, submarine
Duration: 30 days</td><td>Location:
Hawaii Range Complex: Hawaii Operating Area (including Barking Sands Underwater Range Extension; Barking Sands Tactical Underwater Range; Shallow Water Training Range
Southern California Range Complex</td></tr>
<tr><td>Potential Impact Concerns
(Information regarding deconstruct categories and stressors)</td><td colspan="2">Acoustic: Mid-frequency sonar (e.g., MF1, MF1K, MF2, MF2K, MF3, MF4, MF5, MF6, ASW2, ASW3, ASW4,) light and heavyweight torpedoes, (e.g., TORP1, TORP2), high-frequency acoustic modems and tracking pingers, vessel noise, aircraft noise
Energy: None
Physical Disturbance and Strike: Military expended material strike, vessel and in-water device strike, aircraft strike (birds only)
Entanglement: Torpedo guidance wires, parachutes
Ingestion: Parachutes, target and munitions fragments, small-caliber gun rounds, chaff</td></tr>
</table>

Activity Name	Activity Description
Major Training Events	
Rim of the Pacific Exercise	
Detailed Military Expended Material Information	Anti-Submarine Warfare target: One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) per event. If target is air-dropped, one parachute per target Target remnants, chaff, flares Sonobuoys: (one parachute for each sonobuoy) Large, medium, and small-caliber projectiles, bombs, missiles, rockets Torpedo guidance wire Expendable acoustic countermeasures
Assumptions used for Analysis	All Military Expended Material, ordnance, explosives, and sonar use is included in individual events

A.1.10.4 Multi-Strike Group Exercise

Activity Name	Activity Description	
Major Training Events		
Multi-Strike Group Exercise	A 10-day exercise in which up to three strike groups would conduct training exercises simultaneously.	
Long Description	Elements of the anti-submarine warfare tracking exercise combine in the exercise of multiple air, surface, and subsurface units, over a period of up to 10 days. No explosive ordnance is used. Sonobuoys, active and passive sonar, and Nixie are used. The AN/SLQ-25 Nixie is a surface ship countermeasure system that includes a towed torpedo decoy device and a shipboard signal generator. The decoy emits signals to draw a torpedo away from its intended target. Up to three Strike Groups would conduct training exercises simultaneously in the Hawaii Range Complex. The Strike Groups would not be homeported in Hawaii, but would stop in Hawaii en route to a final destination. The Strike Groups would be in Hawaii for up to 10 days per exercise. The exercise would involve Navy assets engaging in a "free play" battle scenario, with U.S. forces pitted against a replicated opposition force. The exercise provides realistic in-theater training.	
Information Typical to the Event	**Platform:** Multiple surface combatant vessels, aircraft, and submarines **Systems:** Anti-submarine warfare systems, anti-surface warfare and anti-air warfare gun and missile systems **Ordnance/Munitions:** Numerous gun rounds, bombs, and missiles, all captured in specific events **Targets:** MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30 recoverable training target, submarine **Duration:** Each multi-strike group exercise lasts for up to 10 days and consists of multiple 12-hour Anti-Submarine Warfare events.	**Location:** Hawaii Operating Area Southern California Operating Area and Point Mugu Range (overlap area only)
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF1K, MF2, MF2K, MF3, MF4, MF5, MF6, ASW2, ASW3, ASW4,) Light and heavyweight torpedoes, (e.g., TORP1, TORP2), high-frequency acoustic modems and tracking pingers, vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, vessel and in-water device strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes,	
Detailed Military Expended Material Information	Anti-Submarine Warfare target: One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) per event. If target is air-dropped, one parachute per target Target remnants, chaff, flares Sonobuoys: (one parachute for each sonobuoy) Large, medium, and small-caliber projectiles, bombs, missiles, rockets Expendable acoustic countermeasures	
Assumptions used for Analysis	All Military Expended Material, ordnance, and sonar use is included in individual events	

A.1.10.5 Integrated Anti-Submarine Warfare Course

Activity Name	Activity Description	
Major Training Events		
Integrated Anti-Submarine Warfare Course	Multiple vessels, aircraft, and submarines integrate the use of their sensors, including sonobuoys, to search, detect, and track threat submarines.	
Long Description	Integrated Anti-Submarine Warfare Course is a tailored course of instruction designed to improve Sea Combat Commander and Strike Group integrated anti-submarine warfare warfighting skill sets. Integrated Anti-Submarine Warfare Course is a coordinated training scenario that typically involves five surface ships, two to three embarked helicopters, a submarine and one maritime patrol aircraft searching for, locating, and attacking one submarine. The scenario consists of two 12-hour events that occur five times per year. The submarine may practice simulated attacks against the ships while being tracked. Hull mounted, towed array and dipping sonar is employed by ships and helicopters. The submarine also periodically operates its sonar.	
Information Typical to the Event	**Platform:** Surface vessels, Fixed and rotary-wing aircraft, Submarines, Unmanned vehicles **Systems:** Hull-mounted, Towed array, and Dipping sonar, Mid-frequency sonar, acoustic countermeasures Sonobuoys **Ordnance/Munitions:** Sonobuoys **Targets:** Expendable mobile anti-submarine warfare training targets **Duration:** 2 to 5 days	**Location:** Southern California Operating Area: Southern California Anti-submarine Warfare Range
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonar and other active acoustic sources (e.g., MF1, MF1K, MF2, MF2K, MF3, MF4, MF5, MF6, ASW2, ASW3, ASW4), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, vessel and in-water device strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes, countermeasures, sonobuoy fragments	
Detailed Military Expended Material Information	Parachutes, Sonobuoy fragments, Expended countermeasures	
Assumptions used for Analysis	Two MK-39 Expendable Mobile Anti-Submarine Warfare Training Target may be used in place of an actual submarine target Air deployed sonobuoy will have a parachute	

A.1.10.6 Group Sail

Activity Name	Activity Description	
Major Training Events		
Group Sail	Multiple ships and helicopters integrate the use of sensors, including sonobuoys, to search, detect, and track a threat submarine. Group sail exercises are not dedicated Anti-Submarine Warfare events and involve multiple warfare areas.	
Long Description	Multiple ships and helicopters integrate the use of sensors, including sonobuoys, to search, detect, classify, localize, and track a threat submarine to launch a torpedo. Group sail exercises are not dedicated ASW events and involve multiple warfare areas. Group Sail is an intermediate training exercise primarily intended to introduce coordinated operations after Unit Level Training and prior to Composite Training. This event stresses planning, coordination, and communications during multiple warfare training scenarios. Two or more ships and up to two helicopters searching for, locating, and attacking one submarine. Typically, one ship and helicopter are actively prosecuting while the other ship and helicopter are repositioning. Simultaneously, the submarine may practice simulated attacks against the ships. Multiple acoustic sources may be active at one time. Typical participants and systems used during a Group Sail include: • Navy Destroyer (2) • Navy Frigate (1) • Submarine (1) • Maritime Patrol Aircraft (1) • MH-60 (3)	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, surface combatant vessels, submarine **Systems:** Mid-frequency hull mounted sonar, towed array and dipping sonar, acoustic countermeasures high-frequency acoustic modems and tracking pingers **Ordnance/Munitions:** Explosive sonobuoys may be used **Targets:** Expendable Mobile Anti-submarine Warfare Training Targets **Duration:** 2 to 3 days	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency hull mounted sonar, towed array and dipping sonar, high frequency acoustic modems, acoustic countermeasures, and tracking pingers (HF1, MF1, MF2, MF3, MF4, MF5, MF6, ASW2, ASW3, ASW4), underwater explosives (E4) vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, aircraft strike (birds only), military expended materials, seafloor device strike **Entanglement:** Parachutes **Ingestion:** Parachutes	
Military Expended Detailed Material Information	One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) If target is air-dropped, one parachute per target Sonobuoys: (one parachute for each sonobuoy), expended countermeasures	
Assumptions Used for Analysis	One Destroyer Squadron in Hawaii will conduct two Group Sails per year. These exercises are also known by the Hawaiian name "Koa Kai" (ocean warrior). Koa Kai is a 2 to 3 day event including Anti-Submarine Warfare. While preference will be to train against an actual submarine, or MK 30 recoverable target, assume only MK 39 expendable targets will be used.	

A.1.10.7 Undersea Warfare Exercise

Activity Name	Activity Description	
Major Training Events		
Undersea Warfare Exercise	Elements of Anti-Submarine Warfare Tracking Exercises combine in this exercise of multiple air, surface, and subsurface units, over a period of several days. Sonobuoys released from aircraft. Active and passive sonar used.	
Long Description	Elements of the anti-submarine warfare tracking exercise combine in an exercise of multiple air, surface, and subsurface units, over a period of 4 days. No explosive ordnance. Sonobuoys are released from aircraft, and active and passive sonar is used. Undersea Warfare Exercise is conducted up to five times annually. Undersea Warfare Exercise is an assessment based anti-submarine warfare exercise conducted by Expeditionary Strike Groups and Carrier Strike Groups while in transit from the west coast of the United States to the Western Pacific Ocean. Undersea Warfare Exercise can involve more than one Carrier Strike Group or Expeditionary Strike Group formation. Typical systems and participants used during an Undersea Warfare Exercise include: • AN/SQS-53: 64 hours (total = 192 hours) (3 Guided Missile Destroyers (DDGs) x 64 hours each) • Nixie (DDG): 70 hours (total = 210 hours) (3 DDG x 70 hours each) • AN/SSQ-62: 2 buoys (total = 6 buoys) (3 DDG x two buoys each) • AN/SQS-56: 64 hours • Nixie (Fast Frigate): 70 hours • AN/SSQ-62: 02	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, Fixed-wing Aircraft, submarines **Systems:** Mid-frequency and high-frequency sonar, dipping sonar high-frequency acoustic modems and sonobuoys **Ordnance/Munitions:** None **Targets:** MK-30, MK-39 Expendable Mobile Anti-submarine Warfare Training Targets, submarine **Duration:** 4 days	**Location:** Hawaii Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency, high-frequency sonar, sonobuoys, high-frequency acoustic modems, and dipping sonar (MF1, MF2, MF3, MF4, MF5, MF6, ASW2, ASW4), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, aircraft strike, military expended materials **Entanglement:** Parachutes **Ingestion:** Parachutes	
Military Expended Detailed Material Information	One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) If target is air-dropped, one parachute per target Sonobuoys: (one parachute for each sonobuoy)	
Assumptions Used for Analysis	All MEM, ordnance, explosives, and sonar use is included in individual events.	

A.1.10.8 Ship Anti-Submarine Warfare Readiness and Evaluation Measuring

Activity Name	Activity Description	
Major Training Events		
Ship Anti-Submarine Warfare Readiness and Evaluation Measuring	This exercise will typically involve multiple ships, submarines, and aircraft in several coordinated events over a period of a week or less. The Navy uses this exercise to collect and analyze high-quality data to quantitatively "assess" surface ship Anti-Submarine Warfare readiness and effectiveness.	
Long Description	Ship Anti-Submarine Warfare Readiness and Evaluation Measuring Exercise is a Chief of Naval Operations chartered program with the overall objective to collect and analyze high-quality data to quantitatively assess surface ship anti-submarine warfare readiness and effectiveness. The exercise will typically involve multiple ships, submarines, and aircraft in several coordinated events over a period of a week or less.	
Information Typical to the Event	**Platform:** Multiple rotary-wing aircraft, fixed-wing aircraft, submarines **Systems:** Mid-frequency and high-frequency sonar, dipping sonar, high frequency acoustic modems and sonobuoys **Ordnance/Munitions:** None **Targets:** MK-30, MK-39 Expendable Mobile Anti-submarine Warfare Training Targets, submarine **Duration:** 5-7 days/1 time per year	**Location:** Southern California Operating Area: Southern California Anti-submarine Warfare Range
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency, high-frequency sonar, high frequency acoustic modem, sonobuoys, and dipping sonar (MF1, MF2, MF3, MF4, MF5, MF6, ASW2, ASW4), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, Aircraft strike, Military expended materials **Entanglement:** Parachutes **Ingestion:** Parachutes	
Military Expended Detailed Material Information	• One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) • If target is air-dropped, one parachute per target • Sonobuoys: (one parachute for each sonobuoy)	
Assumptions Used for Analysis	All MEM, ordnance, explosives, and sonar use is included in individual events.	

A.2 NAVAL AIR SYSTEMS COMMAND TESTING ACTIVITIES

Naval Air Systems Command events will closely follow Fleet primary mission areas, such as the testing of airborne mine warfare and anti-submarine warfare weapons and systems. Naval Air Systems Command events include, but are not limited to, the testing of new aircraft platforms, weapons, and systems that have not been integrated into Fleet training events, such as directed energy weapons and the Joint Strike Fighter. In addition to testing new platforms, weapons, and systems, Naval Air Systems Command also conducts lot acceptance testing of airborne weapons and sonobuoys in support of the Fleet. These types of events do not fall within one of the Fleet primary mission areas; however, in general, most Naval Air Systems Command testing events in terms of their potential environmental effects are similar to Fleet training events.

While many of these systems will eventually be used by the Fleet during normal training and will be addressed in this EIS/OEIS for those Fleet activities, testing and development activities involving the same or similar systems as will be used by operational Fleet units may be used in different locations and manners than when actually used by operational Fleet units. Hence, the analysis for testing events and training of Fleet units may differ.

A.2.1 ANTI-AIR WARFARE TESTING

A.2.1.1 Air Combat Maneuver Test

Activity Name	Activity Description	
Anti-Air Warfare		
Air Combat Maneuver	Aircrews engage in flight maneuvers designed to gain a tactical advantage during combat.	
Long Description	Air Combat Maneuver is the general term used to describe an air-to-air test event involving two or more aircraft, each engaged in continuous proactive and reactive changes in aircraft attitude, altitude, and airspeed. No weapons are fired during Air Combat Maneuver activities.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., F-35; F/A-18, E/A-18G) **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 1.5 to 2 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Two Chaff Flares per event that are captured under Air Platform/Vehicle Test.	

A.2.1.2 Air Platform Vehicle Test

Activity Name	Activity Description	
Anti-Air Warfare		
Air Platform/Vehicle Test	Testing performed to quantify the flying qualities, handling, airworthiness, stability, controllability, and integrity of an air platform or vehicle, and in-flight refueling capabilities. No weapons are released during an Air Platform/Vehicle Test.	
Long Description	The Air Platform/Vehicle Test describes the testing performed to quantify the flying qualities, handling, airworthiness, stability, controllability, and integrity of an air platform/vehicle. Integration of non-weapons system including-flight refueling tests are also conducted as part of an Air Platform/Vehicle Test. Test results are compared against design and performance specifications for compliance. The test results are also used to define stability and controllability characteristics and limitations and to improve and update existing analytical and predictive models. A wide variety of fixed-wing and rotary-wing aircraft, including unmanned aerial systems would undergo air platform/vehicle testing. No weapons are released during an Air Platform/Vehicle Test. Aircraft may employ laser detection for targeting systems and trailing antenna. Events may involve two or more fighter jet aircrafts and a towed target tractor by a contracted aircraft (e.g., Lear jet for laser targeting tests).	
Information Typical to the Event	**Platform:** Fixed and rotary-wing (e.g. V-22, F-35, E-2/C-2), includes Unmanned Aerial Systems **Systems:** None **Ordnance/Munitions:** Flares **Targets:** None **Duration:** 2 to 8 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** In-air low energy lasers **Physical Disturbance and Strike:** Military expended material strike (fuel tanks or similar), Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Fuel tanks, carriages, flares, dispensers, or similar types of support systems on aircraft may be jettisoned depending on test	
Assumptions used for Analysis	Estimated two to four fuel tanks expended per event; however this can vary based on requirements. fuel tanks may contain water to simulate different fuel levels.	

A.2.1.3 Air Platform Weapons Integration Test

Activity Name	Activity Description	
Anti-Air Warfare		
Air Platform Weapons Integration Test	Testing performed to quantify the compatibility of weapons with the aircraft from which they would be launched or released. Mostly non-explosive weapons or shapes are used.	
Long Description	The Air Platform Weapons Integration Test describes the testing performed to quantify the compatibility of weapons with the aircraft from which they would be released. Tests evaluate the compatibility of the weapon and its carriage, suspension, and launch equipment with the performance and handling characteristics of the designated aircraft. Additional tests assess the ability of the weapon to separate or launch safely from the aircraft at combat velocities, including at supersonic speeds. Test results are compared against design specifications for compliance. The test results are also used to define performance characteristics and to improve and update existing analytical and predictive models.	
Information Typical to the Event	**Platform:** Fixed and rotary-wing aircraft (e.g., F/A-18; F-35 ; E/A-18G; MH-60R) **Systems:** Gun systems integration; Air Intercept Missile Series (e.g., AIM-9x); Advanced Medium Range Air-to-Air Missile; AGM-114R, MK46, MK54, 20 mm **Ordnance/Munitions:** Missiles, rockets, small and medium-caliber projectiles, bombs (non-explosive) **Targets:** The use of drones, such as the BQM-74 and 34, may be used as a target for weapon and mission system test events. Surface targets will also be used as needed for proposed test events. **Duration:** 1.5 to 2.5 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Weapons firing and aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles, missiles, rockets, bombs), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Medium-caliber projectiles, casings	
Detailed Military Expended Material Information	Small-caliber projectiles Medium-caliber canon rounds Non-explosive rockets and missiles Non-explosive bombs Weapons carriage, suspension, and launch equipment	
Assumptions used for Analysis	Estimate two to four weapons carriages expended per event	

A.2.1.4 Intelligence, Surveillance, and Reconnaissance Test

Activity Name	Activity Description	
Anti-Air Warfare		
Intelligence, Surveillance, and Reconnaissance Test	Aircrews use all available sensors to collect data on threat vessels.	
Long Description	An Anti-Air Warfare intelligence, surveillance, and reconnaissance test involves evaluating communications capabilities of fixed-wing and rotary-wing aircraft, including unmanned systems that can carry cameras, sensors, communications equipment, or other payloads. New systems are tested at sea to ensure proper communications between aircraft and vessels. Several unmanned aerial systems are planned for testing, including the Broad Area Maritime Surveillance system, Fire Scout vertical take-off and landing tactical unmanned air vehicle, and the Unmanned Combat Air System; Aircraft Carrier Demonstration; Unmanned Aerial System. Unmanned Aerial Systems are remotely piloted or self-piloted aircraft. Tactical Unmanned Aerial Systems are designed to support tactical commanders with near-real-time imagery intelligence at ranges up to 200 kilometers. Most small- to mid-sized unmanned systems, such as Small Tactical Unmanned Aerial System/Tier II, act as eyes in the sky, relaying raw imagery back to military personnel on the ground. The data are then processed, analyzed, and shared up and down the chain of command. New technology systems provide combat identification Friend or Foe and are used for aircraft and ship-based communications.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., E-2 and P-8, P-3); Rotary-wing aircraft; Broad Area Maritime Surveillance system; Fire Scout vertical take-off and landing tactical unmanned air vehicle; Unmanned Combat Air System; Aircraft Carrier Demonstration; Small Tactical Unmanned Aerial System/Tier II **Systems:** Small Tactical Unmanned Aerial Systems (e.g., MK XII-Mode 5) **Ordnance/Munitions:** None **Targets:** None **Duration:** 2-20 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.2 ANTI-SURFACE WARFARE TESTING

A.2.2.1 Air-to-Surface Missile Test

Activity Name	Activity Description	
Anti-Surface Warfare		
Air-to-Surface Missile Test	This event is similar to the training event missile exercise air-to-surface. Test may involve both fixed-wing and rotary-wing aircraft launching missiles at surface maritime targets to evaluate the weapons system or as part of another systems integration test.	
Long Description	Similar to a missile exercise air-to-surface, an Air to Surface Missile Test may involve both fixed-wing and rotary-wing aircraft launching missiles at surface maritime targets to evaluate the weapons system or as part of another systems integration test. Air-to-Surface Missile Tests can include high explosive, non-explosive, or non-firing (captive air training missile) weapons. Both stationary and mobile targets would be utilized during testing, and some operational tests would use explosive missiles (i.e., high explosive warhead). All developmental testing will use non-explosive missile (i.e., non-explosive warhead) with a live motor. NAVAIR plans to conduct integration testing of the MH-60R/S helicopters and the joint air to ground missile. Both stationary and mobile targets would be using during testing. Approximately 25 percent of some operational tests could use explosive missiles (i.e. high explosive warhead). All developmental testing will use non-explosive (i.e., non-explosive warhead). Similar integration tests would be conducted with the MH-60R/S and the Hellfire air to ground missile. Approximately 25 percent of these tests could involve high-explosive missiles (i.e. high-explosive warhead). P-3 and P-8A fixed-wing aircraft plan to conduct software and weapons verification testing with Harpoon or Joint Stand-off Weapon (or equivalent) missiles. Some explosive missiles are planned for use.	
Information Typical to the Event	**Platform:** Fixed and rotary-wing aircraft (e.g., P3, P8; MH 60) **Systems:** Missile systems **Ordnance/Munitions:** Joint air to surface missile; Hellfire air-to-ground missile (high-explosive); Harpoon, Joint Stand-off Weapon (non-explosive); Captive air training missile; SLAM-ER missile **Targets:** Stationary and mobile surface marine targets **Duration:** 2 to 4 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives, aircraft noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (missiles), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Missile fragments, Target fragments	
Detailed Military Expended Material Information	Missile and target fragments	
Assumptions used for Analysis	Two air-to-surface missiles per event, 25 percent will be high-explosive	

A.2.2.2 Air-to-Surface Gunnery Test

Activity Name	Activity Description	
Anti-Surface Warfare		
Air-to-Surface Gunnery Test	This event is similar to the training event gunnery exercise air-to-surface. Strike fighter and helicopter aircrews evaluate new or enhanced aircraft guns against surface maritime targets to test that the gun, gun ammunition, or associated systems meet required specifications or to train aircrew in the operation of a new or enhanced weapons system.	
Long Description	Strike fighter and helicopter aircrews evaluate new or enhanced aircraft guns against surface maritime targets to test that the gun, gun ammunition, or associated systems meets required specifications or to train aircrew in the operation of a new or enhanced weapons system. Non-explosive practice munitions are typically used during this type of test; however, a small number of high explosive rounds may be used during final testing. Rounds that may be used include 7.62 mm, 20 mm, 30 mm, 0.30-caliber, and 0.50-caliber gun ammunition.	
Information Typical to the Event	**Platform:** Fixed-wing and rotary aircraft (e.g., F-35; F/A-18; and MH 60) **Systems:** Small- and medium-caliber gun systems (GAU-17, GAU-21, M197, M230, M240) **Ordnance/Munitions:** Small- and Medium-caliber projectiles (e.g., 7.62 mm, 20 mm, 30 mm, 30 mm supercavitating, 0.30 caliber, and 0.50 caliber [non-explosive and explosive]) **Targets:** Stationary and mobile surface maritime targets may be used **Duration:** 2 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (projectiles), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Projectile fragments, casings, target fragments, medium-caliber projectiles	
Detailed Military Expended Material Information	Projectiles Casings Target fragments Projectile fragments	
Assumptions used for Analysis	None	

A.2.2.3 Rocket Test

Activity Name	Activity Description	
Anti-Surface Warfare		
Rocket Test	Rocket tests are conducted to evaluate the integration, accuracy, performance, and safe separation of laser-guided and unguided 2.75-inch rockets fired from a hovering or forward flying helicopter or from a fixed-wing strike aircraft.	
Long Description	Rocket tests are conducted to evaluate the integration, accuracy, performance, and safe separation of laser-guided and unguided 2.75-inch rockets fired from a hovering or forward flying helicopter or from a fixed-wing strike aircraft. Rocket tests would involve the release of primarily live motor/non-explosive warhead rockets. Some high explosive warhead rockets would be tested, and during a jettison test, rockets with a non-explosive motor and non-explosive warhead would be jettisoned along with the rocket launcher. Rocket tests are also conducted to train aircrew on the use of new or enhanced weapons systems. Rocket types may include variations of the Hydra-70 rocket developed under the Advanced Precision Kill Weapons System program or similar munitions developed under Low-cost Guided Imaging Rocket program as well as MEDUSA rockets. All rockets planned for testing are 2.75-inch rockets. Some rocket tests may be conducted in conjunction with upgrades to or integration of the Forward Looking Infrared targeting system.	
Information Typical to the Event	**Platform:** Fixed-wing or rotary aircraft (e.g., F/A 18; F-35; MH-60) **Systems:** **Ordnance/Munitions:** 2.75 inch rockets (e.g., Hydra-70 or similar [explosive and non-explosive]) **Targets:** Stationary and mobile surface maritime targets may be used **Duration:** 1.5 to 2 hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (rockets), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Rocket fragments, target fragments	
Detailed Military Expended Material Information	Rocket fragments Target fragments Rocket launcher	
Assumptions used for Analysis	Under the No Action Alternative, all rockets are non-explosive Alternatives 1 and 2: Multiple rockets fired per event, 25 percent which will be high-explosive	

A.2.2.4 Laser Targeting Test

Activity Name	Activity Description	
Anti-Surface Warfare		
Laser Targeting Test	Aircrews illuminate enemy targets with lasers.	
Long Description	Aircrew use laser targeting devices integrated into aircraft or weapons systems to evaluate targeting accuracy and precision and to train aircrew in the use of newly developed or enhanced laser targeting devices designed to illuminate designated targets for engagement with laser-guided weapons. No weapons are released during a laser targeting test.	
Information Typical to the Event	**Platform:** Rotary or fixed-wing aircraft (e.g., MH-60; P8) **Systems:** Laser targeting systems, including the Laser Range Designator on the MH-60 helicopters **Ordnance/Munitions:** None **Targets:** None **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** In-air low energy lasers **Physical Disturbance and Strike:** Aircraft strikes (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	Laser energy for targeting is not carried forward for analysis	

A.2.3 ELECTRONIC WARFARE TESTING

A.2.3.1 Electronic Systems Evaluation

Activity Name	Activity Description	
Electronic Warfare		
Electronic Systems Evaluation	Test to evaluate the effectiveness of electronic systems to control, deny, or monitor critical portions of the electromagnetic spectrum. In general, Electronic Warfare testing will assess the performance of three types of Electronic Warfare systems: Electronic Attack, Electronic Protect, and Electronic Support.	
Long Description	Electronic Systems Evaluations are performed to determine the effectiveness of designated Electronic Warfare systems to control, deny, or monitor critical portions of the electromagnetic spectrum. In general, Electronic Warfare testing will assess the performance of three types of Electronic Warfare systems; specifically, Electronic Attack, Electronic Protect, and Electronic Support. Aircraft Electronic Attack systems are designed to confuse the enemy or deny the enemy the use of its electronically-targeted weapons systems. The Suppression of Enemy Air Defenses and active jamming against hostile aircraft and surface combatant radars are examples of the application of Electronic Attack. Aircraft Electronic Protect systems are designed to intercept, identify, categorize, and defeat threat weapons systems that are already targeting that or other friendly aircraft. Aircraft Electronic Support systems employ passive tactics to intercept, exploit, locate (target), collect, collate, and decipher information from the Radio Frequency spectrum for the purpose of determining the intentions of the radiating source. Test results are compared against design specifications to evaluate the performance of the actually Electronic Warfare system. The test results are also used to define performance characteristics and to improve and update existing analytical and predictive models.	
Information Typical to the Event	**Platform:** Fixed or rotary-wing aircraft (e.g., E-2/C-2, P-3C, P-8, F/A-18, E-6B; CH-53K) **Systems:** Electronic warfare systems (electronic attack, electronic protect, and electronic support) **Ordnance/Munitions:** None **Targets:** None **Duration:** 2 to 6 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.4 ANTI-SUBMARINE WARFARE TESTING

A.2.4.1 Anti-Submarine Warfare Torpedo Test

Activity Name	Activity Description	
Anti-Submarine Warfare		
Anti-Submarine Warfare Torpedo Test	This event is similar to the training event, Torpedo Exercise. Test evaluates Anti-Submarine Warfare systems onboard rotary-wing and fixed-wing aircraft and the ability to search for, detect, classify, localize, and track a submarine or similar target.	
Long Description	Similar to a Torpedo Exercise, an Anti-Submarine Warfare Torpedo Test evaluates Anti-Submarine Warfare systems onboard rotary-wing (e.g., MH-60R helicopter) and fixed-wing Marine Patrol Aircraft (e.g., P-8, P-3) aircraft and the ability to search for, detect, classify, localize, track, and attack a submarine or similar target (e.g., MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, or MK-30). The focus of the Anti-Submarine Warfare Torpedo test is on the torpedo and torpedoes (e.g., MK-46 or MK-54), but other Anti-Submarine Warfare systems are often used during the test, such as AN/AQS-22 dipping sonar (MH-60R) and sonobuoys (e.g., AN/SSQ-62). MK-39 or MK-30 targets simulate a submarine threat and are deployed at varying depths and speeds. If available, tests may be conducted using a submarine as the target. This activity can be conducted in shallow or deep waters and aircraft can originate from a land base or from a surface ship. The Torpedo Test culminates with the release of an exercise torpedo against the target and is intended to evaluate the targeting, release, and tracking process of deploying torpedoes from aircraft. All exercise torpedoes used in testing are either running (EXTORP) or non-running (REXTORP). Non-explosive torpedoes are recovered. A parachute assembly and guidance wire used for aircraft-launched torpedoes is jettisoned and sinks. Ballast (typically lead weights) may be released from the torpedoes to allow for recovery and sink to the bottom.	
Information Typical to the Event	**Platform:** Fixed and rotary-wing aircraft (e.g., P-3/P-8, MH-60R) **Systems:** Dipping sonar(e.g., AN/AQS-22); sonobuoys (e.g., AN/SSQ-62) **Ordnance/Munitions:** Torpedoes (e.g., MK-46, MK-54, MK-50, and MK-56; non-explosive) **Targets:** MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30, or submarine **Duration:** 2 to 6 flight hours/event.	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency Sonar (MF4), sonobuoys (MF5), lightweight torpedoes (TORP1), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, aircraft strike (birds only) **Entanglement:** Parachutes, guidance wire **Ingestion:** Parachutes	
Detailed Military Expended Material Information	Torpedo accessories (e.g. parachute assembly, guidance wire) Sonobuoys Ballast targets	
Assumptions used for Analysis	Assume one torpedo accessory package (parachute, ballast, guidance wire) per torpedo Assume one target per torpedo Assume 12 sonobuoys per event Assume 15 percent of torpedoes are not recovered	

A.2.4.2 Kilo Dip

Activity Name	Activity Description	
Anti-Submarine Warfare		
Kilo dip	Functional check of the AN/AQS-22 dipping sonar prior to conducting full test or training event on the dipping sonar.	
Long Description	A kilo dip is the operational term used to describe a functional check of a helicopter deployed dipping sonar system. During a functional check, a single MH-60R helicopter would transit to an area designated for dipping sonar testing (i.e., a dip point usually close to shore) and would deploy the AN/AQS-22 sonar transducer assembly via a reel mechanism to a predetermined depth or series of depths while the helicopter hovers over the dip point. Once at the desired depth, the AN/AQS-22 sonar transducer would be activated and would transmit a pulsed, acoustic signal (i.e., ping) for approximately two to four minutes (enough time to check that all systems are functioning properly). After the check is completed, the AN/AQS-22 sonar transducer assembly would be reeled in, and in some instances the helicopter would transit to a second dip point before the procedure is repeated. A kilo dip is a precursor to more comprehensive testing.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60R) **Systems:** Mid-frequency dipping sonar (AN/AQS-22) **Ordnance/Munitions:** None **Targets:** None **Duration:** 1.5 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (MF4), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.4.3 Sonobuoy Lot Acceptance Test

Activity Name	Activity Description	
Anti-Submarine Warfare		
Sonobuoy Lot Acceptance Test	Sonobuoys are deployed from surface vessels and aircraft to verify the integrity and performance of a lot or group of sonobuoys in advance of delivery to the Fleet for operational use.	
Long Description	Sonobuoys are deployed from surface vessels and aircraft to verify the integrity and performance of a lot or group of sonobuoys in advance of delivery to the Fleet for operational use. Lot acceptance testing would occur for the following types of sonobuoys: AN/SSQ-62 DICASS, AN/SSQ-110 Improved Extended Echo Ranging, AN/SSQ-125 MAC, MK-61 SUS, MK-64 SUS, MK-82 SUS, MK-84 SUS, and Mini Source. Some sonobuoys are high explosive.	
Information Typical to the Event	**Platform:** Surface combat vessels, fixed-wing aircraft, rotary-wing aircraft **Systems:** Sonobuoys (AN/SSQ-62x DICASS, AN/SSQ-110x Improved Extended Echo Ranging, AN/SSQ-125 MAC, MK-61 SUS, MK-64 SUS, MK-82 SUS, MK-84 SUS, Mini Source, and high duty cycle sonar **Ordnance/Munitions:** High explosive sonobuoy systems described above **Targets:** None **Duration:** 6 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Sonar and other active acoustic sources (ASW2, MF5, MF6), underwater explosives (E3, E4), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, vessel strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes, sonobuoy fragments	
Detailed Military Expended Material Information	Parachutes Sonobuoy fragments	
Assumptions used for Analysis	Assume one parachute per sonobuoy Assume an average of 80 non-explosive sonobuoys per event; however the number of sonobuoys used in each event may vary	

A.2.4.4 Anti-Submarine Warfare Tracking Test – Helicopter

Activity Name	Activity Description	
Anti-Submarine Warfare		
Anti-Submarine Warfare Tracking Test – Helicopter	This event is similar to the training event, Anti-Submarine Tracking Exercise–Helicopter. The test evaluates the sensors and systems used to detect and track submarines and to ensure that helicopter systems used to deploy the tracking systems perform to specifications.	
Long Description	Similar to an Anti-Submarine Tracking Exercise–Helicopter, an Anti-Submarine Tracking Test — Helicopter evaluates the sensors and systems used to detect and track submarines and to ensure that platform systems used to deploy the tracking systems perform to specifications. Typically, one MH-60R helicopter conducts Anti-Submarine testing using the AN/AQS-22 dipping sonar, tonal sonobuoys (e.g., AN/SSQ-62), passive sonobuoys (e.g., AN/SSQ-53D/E), or explosive sonobuoys (e.g., mini sound-source seeker buoys). Targets (e.g., MK-39 Expendable Mobile Anti-Submarine Warfare Training Target or MK-30) may also be employed during an Anti-Submarine event. If available, tests may be conducted using a submarine as the target. This activity would be conducted in shallow or deep waters and could initiate from a land base or from a surface ship. Helicopter Anti-Submarine tests are intended to evaluate the sensors and systems used to detect and track submarines and to ensure that platform systems used to deploy the tracking systems perform to specifications. Some Anti-Submarine Helicopter Tracking Test could be conducted as part of an Anti-Submarine Tracking Coordinated Event with Fleet training activities.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60R) **Systems:** Dipping sonar (e.g., AN/AQS-22), tonal sonobuoys (e.g., AN/SSQ-62), explosive sonobuoys (e.g., mini sound-source seeker buoys), passive sonobuoys (e.g., AN/SSQ-53),and new development of mid-frequency active sonar buoys (follow-on to DICASS) **Ordnance/Munitions:** High explosive sonobuoys [mini sound-source seeker buoys (i.e., mini-buoys)] **Targets:** MK-39 Expendable Mobile Anti-Submarine Warfare Training Target, MK-30 recoverable target, submarine **Duration:** 2 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (MF4), sonobuoys (MF5), underwater explosives (E3), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes, explosive sonobuoy fragments	
Detailed Military Expended Material Information	Sonobuoy fragments, parachutes	
Assumptions used for Analysis	One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) If target air dropped, one parachute/target 24 sonobuoys per event	

A.2.4.5 Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft

Activity Name	Activity Description	
Anti-Submarine Warfare		
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft	This event is similar to the training event, Anti-Submarine Warfare Tracking Exercise–Maritime Patrol Aircraft. The test evaluates the sensors and systems used by maritime patrol aircraft to detect and track submarines and to ensure that aircraft systems used to deploy the tracking systems perform to specifications and meet operational requirements.	
Long Description	Similar to an Anti-Submarine Warfare Tracking Exercise-Maritime Patrol Aircraft. Anti-Submarine Warfare Tracking Test—Maritime Patrol Aircraft evaluates the sensors and systems used to detect and track submarines and to ensure that platform systems used to deploy the tracking systems perform to specifications and meet operational requirements. P-3 or P-8A fixed-wing aircraft conduct Anti-Submarine Warfare testing using tonal sonobuoys (e.g., AN/SSQ-62 DICASS), explosive sonobuoys (e.g., AN/SSQ-110 Improved Extended Echo Ranging), passive sonobuoys (e.g., AN/SSQ-53), torpedoes (e.g., MK-46), smoke devices (e.g., MK-58), SUS devices (e.g., MK-61 SUS), missiles (e.g., harpoons), and chaff. Targets (e.g., MK-39 Expendable Mobile Anti-Submarine Warfare Training Target) may also be employed during an Anti-Submarine Warfare scenario. This activity would be conducted in deep waters and could initiate from a land base or from a surface ship. Some Anti-Submarine Warfare Maritime Patrol Aircraft Tracking Test could be conducted as part of a Coordinated Event with Fleet training activities.	
Information Typical to the Event	**Platform:** Fixed-wing Maritime Patrol Aircraft (e.g., P-3, P-8A,) **Systems:** Tonal sonobuoys (e.g., AN/SSQ-62 DICASS); passive sonobuoys (e.g., AN/SSQ-53); Explosive sonobuoys (e.g., AN/SSQ-110 Improved Extended Echo Ranging), **Ordnance/Munitions:** Non-explosive, all recovered; other non-explosive class stores (1000 lbs.) torpedoes, smoke devices, chaff, missiles, SUS devices **Targets:** MK-39 or MK-30 **Duration:** 4 to 6 flight hours/event	**Location:** Hawaii Operating Area Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonobuoys (ASW2, MF5, MF6), underwater explosives (E3), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike, in-water device strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes, sonobuoy fragments, torpedo fragments, chaff	
Detailed Military Expended Material Information	One MK-39 or MK-30 target (MK-30 is recovered and reused, MK-39 is not) If target air dropped, one parachute per target 20-60 sonobuoys per event (one parachute per sonobuoy) Smoke device	
Assumptions used for Analysis	Torpedo, missile, flare, and chaff use will be captured under Anti-submarine warfare Torpedo Test, Anti-Surface Warfare Missile Test, and Chaff Test, respectively: Analysis of these will not be conducted under this activity	

A.2.5 MINE WARFARE TESTING

A.2.5.1 Airborne Mine Neutralization System Test

Activity Name	Activity Description	
Mine Warfare		
Airborne Mine Neutralization Systems Test-AN/AQS-235	Airborne mine neutralization tests of the AN/ASQ-235 evaluate the system's ability detect and destroy mines off of the MH-60 Airborne Mine Countermeasures capable helicopter. The AN/ASQ-235 uses up to four unmanned underwater vehicles equipped with high frequency sonar, video cameras, and explosive neutralizers.	
Long Description	Mine neutralization tests evaluate aircraft and aircraft systems intended to neutralize or otherwise destroy mines through the use of explosives or other munitions. For most neutralization tests, mine shapes or non-explosive mines are used to evaluate new or enhanced mine neutralization systems. The AN/ASQ-235 uses up to four unmanned underwater vehicles equipped with high frequency sonar and video cameras to detect submerged mines. The unmanned underwater vehicles are also equipped with explosives to neutralize the mines after they are located. Data from unmanned underwater vehicles are relayed to the operator in the helicopter through a fiber-optic cable enabling the operator to position the neutralizing charge onto the most vulnerable area of the mine. The explosive charge is then detonated to neutralize the mine. For most tests, recoverable non-explosive neutralizers are used. A mine shape, rather than a high explosive mine, serves as the target and a range support vessel recovers the non-explosive neutralizer and the mine shape following the test. Testing scenarios include a non-explosive neutralizer against an inert mine shape, or a high explosive neutralizer against an explosive mine.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60S) **Systems:** Airborne Mine Neutralization System (e.g. AN/ASQ-235) **Ordnance/Munitions:** Neutralizers (explosive and non-explosive), Mines (explosive and non-explosive) **Targets:** Floating/moored/bottom mine shapes **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High frequency sonar (HF4), underwater explosives (E4, E11), aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only), military expended material strike, seafloor device strike (mine shapes) **Entanglement:** Fiber optic cable **Ingestion:** Mine fragments, neutralizer fragments, fiber optic cable fragments	
Detailed Military Expended Material Information	Fiber-optic cable, plus additional expended material, such as the can that holds and deploys the cable Explosive and target residue (during 20 percent of testing and training when an explosive neutralizer is used) One to four neutralizers deployed per high explosive event Mine shapes are typically retrieved and reused, if they are not too badly damaged from neutralization attempt	
Assumptions used for Analysis	None	

A.2.5.2 Airborne Towed Minehunting Sonar System Test

Activity Name	Activity Description	
Mine Warfare		
Airborne Towed Minehunting Sonar System Test	A mine-hunting system that is towed from an MH-60S helicopter with sonar for detection and classification of bottom and moored mines. An electro-optical sensor allows for identification of bottom mines.	
Long Description	Tests of towed mine-hunting sonar systems (e.g., AN/AQS-20A) evaluate the search capabilities of this helicopter-towed, mine hunting, detection, and classification system. The sonar on the Q20 identifies mine-like objects in the deeper parts of the water column, but is not designed to identify near-surface mines.	
Information Typical to the Event	**Platform:** Rotary-wing (e.g., MH-60S) **Systems:** Towed mine-hunting sonar systems (e.g., AN/AQS-20A) **Ordnance/Munitions:** None **Targets:** Floating/moored/near surface mine or mine shape **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High frequency sonar (HF4), aircraft noise **Energy:** None **Physical Disturbance and Strike:** In-water device strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Anchors (moored mine targets only)	
Assumptions used for Analysis	None	

A.2.5.3 Airborne Towed Minesweeping System Test

Activity Name	Activity Description	
Mine Warfare		
Airborne Towed Minesweeping System Test	Airborne Towed Minesweeping Test (e.g., Organic Airborne and Surface Influence Sweep) would be conducted by a MH-60S helicopter to evaluate the functionality of towed minesweeping devices and the MH-60S at sea. The Organic Airborne and Surface Influence Sweep is towed from a forward flying helicopter and works by emitting an electromagnetic field and mechanically generated underwater sound to simulate the presence of a ship. The sound and electromagnetic signature cause nearby mines to explode.	
Long Description	Airborne Towed Minesweeping Test (e.g., Organic Airborne and Surface Influence Sweep) would be conducted by an Airborne Mine Countermeasures capable MH-60S helicopter to evaluate the functionality of Organic Airborne and Surface Influence Sweep and MH-60S at sea. For most tests, mine sweeping would be simulated using Versatile Exercise Mine System (non-explosive mine shapes that emit a plume of smoke rather than exploding) and high explosive mines at the culmination of testing, approximately one per event. The Organic Airborne and Surface Influence Sweep works by emitting an electromagnetic field and underwater sound generated from a mechanical source to simulate a vessel's sound signature. The Organic Airborne and Surface Influence Sweep serves to "sweep" or cause live mines to detonate when exposed to the electromagnetic field and simulated ship sound signature. The sound generated from the Organic Airborne and Surface Influence Sweep is not sonar, but rather a mechanically-generated sound to simulate a vessel prop.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60S) **Systems:** Towed minesweeping systems (e.g., Organic Airborne and Surface Influence Sweep) **Ordnance/Munitions:** Mines (explosive), Versatile Exercise Mine System **Targets:** Floating/moored/bottom mine shapes (non-explosive and explosive) **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E11), aircraft noise **Energy:** Electromagnetic **Physical Disturbance and Strike:** In-water device strike, seafloor device strike (mine shapes), aircraft strike (birds only) **Entanglement:** None **Ingestion:** Mine fragments	
Detailed Military Expended Material Information	Mine fragments	
Assumptions used for Analysis	Non-explosive mine shapes will be recovered	

A.2.5.4 Airborne Laser-Based Mine Detection System Test

Activity Name	Activity Description	
Mine Warfare		
Airborne Laser-Based Mine Detection System Test	An airborne mine hunting test of the AN/AES-1 Airborne Laser Mine Detection System, that is operated from the MH-60S helicopter and evaluates the system's ability to detect, classify, and fix the location of floating and near-surface, moored mines. The system uses a laser to locate mines and may operate in conjunction with an airborne projectile-based mine detection system to neutralize mines.	
Long Description	During an Airborne Mine Countermeasures test, a MH-60S helicopter evaluates the search capabilities of the AN/AES-1 Airborne Laser Mine Detection System Airborne Laser Mine Detection System is a mine hunting system designed to detect, classify, and localize floating and near-surface, moored sea mines using a laser system. The Airborne Laser Mine Detection System will be integrated into the MH-60S helicopter to provide a rapid wide-area reconnaissance and assessment of mine threats in littoral zones, confined straits, choke points, and amphibious objective areas for Carrier and Expeditionary Strike Groups. The Airborne Laser Mine Detection System uses pulsed laser light to image the entire near-surface volume potentially containing mines. Airborne Laser Mine Detection System is capable of day or night operations without stopping to deploy or recover equipment and without towing any equipment in the water. With un-tethered operations, it can attain high area search rates. This design uses the forward motion of the aircraft to generate image data negating the requirement for complex scanning mechanisms and ensuring high system reliability. Airborne Laser Mine Detection System also provides accurate target geo-location to support follow on neutralization of the detected mines. Airborne Laser Mine Detection System works in conjunction with the Airborne Projectile-Based Mine Clearance System.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60S) **Systems:** AN/AES-1 Airborne Laser Mine Detection System **Ordnance/Munitions:** None **Targets:** Floating/moored mine shapes **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** Aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.5.5 Airborne Projectile-Based Mine Clearance System

Activity Name	Activity Description	
Mine Warfare		
Airborne Projectile-Based Mine Clearance System	An MH-60S helicopter uses a laser-based detection system to search for mines and to fix mine locations for neutralization with an airborne projectile-based mine clearance system. The system neutralizes mines by firing a small- or medium-caliber inert, supercavitating projectile from a hovering helicopter.	
Long Description	During an airborne projectile-based mine clearance system test, an MH-60S helicopter evaluates the search capabilities of an Airborne Projectile-based Mine Clearance System (such as the AN/AWS-2 Rapid Airborne Mine Clearance System) to detect mines and fix mine locations using a laser. The airborne projectile-based mine clearance system can work in tandem with the Airborne Laser Mine Detection System by providing a mine neutralizing (destroying) capability for Airborne Laser Mine Detection System—detected, near-surface mines. The gun (e.g., Bushmaster) fires a medium-caliber (e.g., 30 mm) non-explosive, supercavitating projectile at the target from a hovering MH-60S. The projectile penetrates the target, rendering it non-functional. Mine shapes would almost always be used as the targets during a test. In the event a high explosive mine is used during the final testing phase, an underwater explosion may be generated as the mine is neutralized.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft (e.g., MH-60S) **Systems:** Rapid Airborne Mine Clearance System or similar system **Ordnance/Munitions:** Medium-caliber supercavitating projectile (non-explosive), Mines (non-explosive and explosive) **Targets:** Floating/moored/bottom mine or mine shape **Duration:** 2.5 flight hours/event	**Location:** Southern California Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (E11), aircraft noise **Energy:** In-air low energy laser **Physical Disturbance and Strike:** Military expended material strike (projectiles), seafloor device strike (mine shapes), aircraft strikes (birds only) **Entanglement:** None **Ingestion:** Projectiles (small- and medium-caliber), target fragments	
Detailed Military Expended Material Information	Projectiles (small- and medium-caliber) Target fragments Mine shapes are typically retrieved and reused, if they are not too badly damaged from neutralization attempt	
Assumptions used for Analysis	All mines under the No Action Alternative are non-explosive	

A.2.6 OTHER TESTING

A.2.6.1 Test and Evaluation – Catapult Launch

Activity Name	Activity Description	
Other Testing		
Test and Evaluation – Catapult Launch	Tests evaluate the function of aircraft carrier catapults at sea following enhancements, modifications, or repairs to catapult launch systems, including aircraft catapult launch tests. No weapons or other expendable materials would be released.	
Long Description	Aircraft catapults are systems used to assist aircraft take-off in aircraft carriers. Catapults consist of a track built into the flight deck, below which is a large piston or shuttle that is attached through the track to the nose gear of the aircraft. Navy aircraft launch systems are powered by steam or driven by an electromagnetic motor. Steam-powered catapults draw steam from the ship's boilers to the catapult steam receivers or accumulator, where it is stored at the desired pressure. From the receivers/accumulator, steam is directed to the launching valves, and provides the energy to launch aircraft. The most significant differences between the various types of steam catapults are the length and capacity. An electromagnetic launch system provides higher launch energy capability, reduced weight, volume, and maintenance, increased controllability, availability, reliability, and efficiency. The present electromagnetic aircraft launch system design centers around a linear synchronous motor and supplied power from pulsed disk alternators through a cycloconverter. Average power, obtained from an independent source on the host platform, is stored kinetically in the rotors of the disk alternators. It is then released in a two to three second pulse during a launch. This high-frequency power is fed to the cycloconverter which acts as a rising voltage, rising frequency source to the launch motor. The linear synchronous motor takes the power from the cycloconverter and accelerates the aircraft down the launch stroke, all the while providing "real time" closed loop control. Catapult launch tests would occur on Fleet aircraft carriers during deployment. The specific locations of carriers from 2014-2020 is unknown. No weapons or other expendable materials would be released during catapult tests.	
Information Typical to the Event	**Platform:** Aircraft Carrier (e.g., CVN 68-78), Fixed-wing aircraft (e.g., E-2/C-2) **Systems:** Catapult, Electromagnetic aircraft launch system **Ordnance/Munitions:** None **Targets:** None **Duration:** Fixed-wing aircraft 2 to 6 flight hours/event	**Location:** Throughout HSTT Study Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.6.2 Air Platform Shipboard Integration Test

Activity Name	Activity Description	
Other Testing		
Air Platform Shipboard Integration Test	Tests evaluate the compatibility of aircraft and aircraft systems with ships and shipboard systems. Tests involve physical operations and verify and evaluate communications and tactical data links. This test function also includes an assessment of carrier-shipboard suitability, such as Hazards of Electromagnetic Radiation to Ordnance, Hazard of Electromagnetic Radiation to Personnel, and High Energy Radio Frequency.	
Long Description	The Air Platform Shipboard Integration Test is performed to evaluate the compatibility of an aircraft to operate from designated shipboard platforms, perform shipboard physical operations, and to verify and evaluate communications and tactical data links. This test function also includes an assessment of carrier-shipboard suitability, such as Hazards of Electromagnetic Radiation to Ordnance, Hazard of Electromagnetic Radiation to Personnel, and High Energy Radio Frequency.	
Information Typical to the Event	**Platform:** Aircraft carrier (e.g., CVN 68-78), Fixed-wing aircraft (e.g., E-2/C-2) **Systems:** Data link and communication systems, Hazards of Electromagnetic Radiation to Ordnance, Hazard of Electromagnetic Radiation to Personnel, High Energy Radio Frequency **Ordnance/Munitions:** None **Targets:** None **Duration:** 2 to 6 flight hours/event	**Location:** Throughout HSTT Study Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.2.6.3 Shipboard Electronic Systems Evaluation

Activity Name	Activity Description	
Other Testing		
Shipboard Electronic Systems Evaluation	Tests measure ship antenna radiation patterns and test communication systems with a variety of aircraft.	
Long Description	Shipboard electronic systems evaluation tests measure ship antenna radiation patterns and evaluate communication systems linking vessels and aircraft. Aircraft capable of landing on a vessel (e.g. aircraft carrier or Littoral Combat Ship) temporarily deploy to a nearshore vessel and conduct a variety of tests over a period of days to test newly installed or modified systems onboard the aircraft for compatibility with shipboard electronic systems. Follow-on test and evaluation of unmanned aerial systems would consist of dynamic interface testing, shipboard electromagnetic testing, and envelope expansion tests intended to evaluate capability of the unmanned aerial system to conduct launch and recovery operations from a vessel at sea as well as perform missions in a maritime environment. Altitudes would range from mean seal level to 15,000 ft. above mean seal level with the majority of flights occurring between mean seal level and 3,000 ft. Unmanned aerial systems would include Small Tactical Unmanned Aerial System/Tier II tactical unmanned aerial system, Broad Area Maritime Surveillance System, Fire Scout vertical take-off and landing tactical unmanned air vehicle, and Unmanned Combat Air System; and Aircraft Carrier Demonstration testing. Shipboard testing of the Joint Precision Approach and Landing System, test new technology systems to provide precision guidance to aircraft landing on air capable vessels. At-sea flight test of the CH-53K helicopter would consist of shipboard compatibility (dynamic interface/envelope expansion) and, during Operational Evaluation, amphibious assault scenarios. Shipboard electronic systems evaluation tests of the V-22 helicopter would involve flight and wind envelope expansion interface testing with Amphibious Assault Ships, Amphibious Transport Dock, and Dock Landing Ship class vessels.	
Information Typical to the Event	**Platform:** Fixed-wing aircraft (e.g., E-2/C-2), rotary-wing aircraft (e.g., CH-53K, V-22), unmanned aerial systems, surface ships **Systems:** Joint Precision Approach and Landing System; Broad Area Maritime Surveillance system; Fire Scout vertical take-off and landing tactical unmanned air vehicle; Unmanned Combat Air System; aircraft carrier demonstration; small tactical unmanned aerial system/Tier II **Ordnance/Munitions:** None **Targets:** None **Duration:** 2 to 20 flight hours/event	**Location:** Throughout HSTT Study Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Aircraft noise **Energy:** None **Physical Disturbance and Strike:** vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions used for Analysis	None	

A.3 NAVAL SEA SYSTEMS COMMAND TESTING ACTIVITIES

Naval Sea Systems Command testing activities are aligned with its mission of new ship construction, life cycle support, and weapon systems development. Each major category of Naval Sea Systems Command activities is described below.

A.3.1 NEW SHIP CONSTRUCTION

Ship construction activities include pierside testing events, a series of sea trials, and developmental and operational test and evaluation programs. Pierside and at-sea testing of systems aboard a ship may include activation of acoustic sources, acoustic countermeasures, radars, and radio equipment. Pierside events also consist of light-off and operational checks of the vessel's propulsion, weapons, and other combat systems prior to at-sea operations. However, for purposes of this EIS/OEIS, pierside testing at Navy contractor shipyards will consist only of tactical sonar systems. At sea, each new ship is operated at full power and subjected to high-speed runs and steering tests. At-sea test firing of shipboard weapons systems, including guns, are also conducted.

A.3.1.1 Surface Combatant Sea Trials – Pierside Sonar Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Pierside Sonar Testing	Tests vessel's sonar systems pierside to ensure proper operation.	
Long Description	Pierside sonar testing is one part of the total surface combatant sea trial activity. Surface combatant sonar is tested pierside to ensure proper operation prior to conducting the at-sea portion of the sea trial. Surface combatants included in this activity are the ARLEIGH BURKE class (DDG 51) and the ZUMWALT class (DDG 1000) destroyers.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** Mid-frequency sonar **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration is 3 weeks accumulative per ship, with each source run independently and not continuously during this time	**Location:** Pierside: Pearl Harbor, HI Pierside: San Diego, CA
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF1K, MF10), underwater communications (e.g., MF9) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.1.2 Surface Combatant Sea Trials – Propulsion Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Propulsion Testing	Vessel is run at high speeds in various formations (e.g., straight-line and reciprocal paths).	
Long Description	Propulsion testing is one part of the total surface combatant sea trial activity. Propulsion testing includes vessel maneuvering, including full power runs (speeds in excess of 30 knots) and endurance runs.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Full power runs are conducted for a total of 4 hours, and endurance runs are conducted for a total of 2 hours.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Vessels may not be traveling in a straight line Vessels will operate across the full spectrum of capable speeds Vessels will not be conducting test constantly for the entire duration	

A.3.1.3 Surface Combatant Sea Trials – Gun Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Gun Testing	Gun systems are tested using non-explosive rounds.	
Long Description	Gun testing is one part of the total surface combatant sea trial activity. Tests currently include firing of 5-inch, 0.62-caliber guns, and will potentially include a 155 mm gun for future DDG 1000 platforms.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** Large-caliber guns (5 inch, 155 mm), medium caliber guns (close-in weapons system) **Ordnance/Munitions:** Large- and medium-caliber projectiles (e.g., 5 inch, 155 mm, 20 mm cannon [non-explosive]) **Targets:** None **Duration:** The entire sea trial duration is 4 days, within which gun testing would occur.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, military expended materials strike (non-explosive projectiles) **Entanglement:** None **Ingestion:** Projectiles, casings	
Detailed Military Expended Material Information	26 large-caliber non-explosive practice munitions per event; 700 medium-caliber non-explosive practice munitions per event Projectiles Casings	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration 26 large-caliber non-explosive practice munitions per event, 700 medium-caliber non-explosive practice munitions per event	

A.3.1.4 Surface Combatant Sea Trials – Missile Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Missile Testing	Non-explosive or explosive missiles are fired at target drones to test the launching system.	
Long Description	Missile testing is one part of the total surface combatant sea trial activity. During the event, support craft launch target drones, upon which two explosive or non-explosive missiles are fired.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** Missile launch system **Ordnance/Munitions:** Missiles (explosive and non-explosive) **Targets:** Retrievable mobile targets (e.g., drones) **Duration:** The entire sea trial duration is 4 days, within which missile testing would occur.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise, in-air explosives **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive practice munitions), vessel strike, munitions fragments **Entanglement:** None **Ingestion:** Munitions fragments	
Detailed Military Expended Material Information	Two missiles (explosive or non-explosive)/event	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration Two Missiles per event (explosive or non-explosive) Target drones are recovered by supporting craft	

A.3.1.5 Surface Combatant Sea Trials – Decoy Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Decoy Testing	Includes testing of the MK-36 Decoy Launching system	
Long Description	Testing of the MK-36 Decoy Launching system is one part of the total surface combatant sea trial activity. During the event, chaff cartridges are launched to ensure proper operation of the system.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** MK-36 Decoy Launching system **Ordnance/Munitions:** None **Targets:** None **Duration:** The entire sea trial duration is 4 days, within which decoy launching testing would occur.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel Noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, expended material other than munitions (concrete slugs) **Entanglement:** None **Ingestion:** End caps, pistons, chaff	
Detailed Military Expended Material Information	36 chaff cartridges (end caps, pistons, and chaff) or concrete slugs/event	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration 36 chaff cartridges or concrete slugs per event	

A.3.1.6 Surface Combatant Sea Trials – Surface Warfare Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Surface Warfare Testing – Large Caliber	Vessels defend against surface targets with large-caliber guns.	
Long Description	Surface warfare testing is one part of the total surface combatant sea trial activity. During this event, a high speed maneuverable surface target would run a weaving pattern towards the vessel at speeds in excess of 20 knots. The surface combatant would fire non-explosive large-caliber rounds at the incoming target.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** Large-caliber weapons systems **Ordnance/Munitions:** Large-caliber projectiles (e.g., 5 inch, 155 mm [non-explosive]) **Targets:** Surface targets (e.g., High Speed Maneuverable Surface Target) **Duration:** The entire sea trial duration is 4 days, within which surface warfare testing would occur.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, military expended material strike (non-explosive practice munitions) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Large-caliber projectiles, target fragments	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration 48 rounds/event	

A.3.1.7 Surface Combatant Sea Trials – Anti-Submarine Warfare Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Combatant Sea Trials – Anti-Submarine Warfare Testing	Vessels demonstrate capability of countermeasure systems and underwater surveillance and communications systems.	
Long Description	Anti-submarine warfare testing is one part of the total surface combatant sea trial activity. During this event, hull-mounted sonar systems are operated to test the capability of the systems. Mid- and high-frequency acoustic sources are used during this activity.	
Information Typical to the Event	**Platform:** Surface combatant vessel (e.g., DDG 51 and DDG 1000) **Systems:** Surface ship sonar, Countermeasure systems, Underwater surveillance and communications systems **Ordnance/Munitions:** None **Targets:** Motorized Autonomous Targets (e.g., Expendable Mobile Anti-Submarine Warfare Training Target) **Duration:** The entire sea trial duration is 4 days, within which anti-submarine warfare testing would occur.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF1K, MF10), acoustic countermeasures (e.g., ASW3), underwater communications (e.g., MF9), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration	

A.3.1.8 Other Ship Class Sea Trials – Propulsion Testing

Activity Name	Activity Description	
New Ship Construction		
Other Class Ship Sea Trials – Propulsion Testing	Vessel is run at high speeds in various formations (e.g., straight-line and reciprocal paths).	
Long Description	Propulsion testing is one part of the total sea trial activity. During this event, the vessel is tested for maneuverability, including full power and endurance runs.	
Information Typical to the Event	**Platform:** Amphibious warfare vessels, surface combatant vessels (e.g., Littoral Combat Ship), support craft/other – specialized high speed vessels **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Propulsion testing occurs during one day of a 5-day sea trial.	**Location:** Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration Vessels may not be traveling in a straight line Vessels will operate across the full spectrum of capable speeds	

A.3.1.9 Other Ship Class Sea Trials – Gun Testing – Small Caliber

Activity Name	Activity Description	
New Ship Construction		
Other Class Ship Sea Trials – Gun Testing – Small Caliber	Vessels defend against surface targets with small-caliber guns.	
Long Description	Small-caliber gun testing is included as part of the total sea trial activity. Small-caliber gun testing includes 0.50-caliber guns.	
Information Typical to the Event	**Platform:** Amphibious warfare vessels, surface combatant vessel (e.g., Littoral Combat Ship), support craft/other – specialized high speed, **Systems:** Small-caliber weapon systems **Ordnance/Munitions:** Small-caliber projectiles (e.g., 0.50 caliber [non-explosive]) **Targets:** None **Duration:** Small-caliber gun testing would occur within the 5-day sea trials	**Location:** Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles), vessel strike **Entanglement:** None **Ingestion:** Small-caliber projectiles, casings	
Detailed Military Expended Material Information	Small-caliber projectiles Casings	
Assumptions Used for Analysis	Vessels will not be conducting test constantly for the entire duration	

A.3.1.10 Anti-Submarine Warfare Mission Package Testing

Activity Name	Activity Description	
New Ship Construction		
Anti-Submarine Warfare Mission Package Testing	Ships and their supporting platforms (e.g., helicopters, unmanned aerial vehicles) detect, localize, and prosecute submarines.	
Long Description	Vessels conduct detect-to-engage operations against modern diesel-electric and nuclear submarines using airborne and surface assets (both manned and unmanned). Active and passive acoustic systems are used to detect and track submarine targets, culminating in the deployment of lightweight torpedoes to engage the threat.	
Information Typical to the Event	**Platform:** Surface Combatant Vessels (e.g., Littoral Combat Ship); Rotary-wing aircraft, Submarines **Systems:** Surface ship sonar, helicopter-deployed sonar, active sonobuoys, torpedo sonar **Ordnance/Munitions:** Non-explosive torpedoes **Targets:** Motorized Autonomous Targets (e.g., Expendable Mobile Anti-Submarine Warfare Training Target) **Duration:** Event duration is approximately 1 to 2 weeks, with 4 to 8 hours of active sonar use with intervals of non-activity in between.	**Location:** Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF12), helicopter-deployed sonar (e.g., MF4), active sonobuoys (e.g., MF5), torpedo sonar (e.g., TORP1); Anti-submarine sonar (e.g., ASW1); acoustic countermeasures (e.g., ASW3), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel and in-water device strike, military expended material strike (sonobuoys), towed device strike, aircraft strike (birds only) **Entanglement:** Parachutes **Ingestion:** Parachutes	
Detailed Military Expended Material Information	Torpedo launch accessories Sonobuoys and parachutes	
Assumptions Used for Analysis	One target per event Two sonobuoys expended per event; all sonobuoys have a parachute unless otherwise noted	

A.3.1.11 Surface Warfare Mission Package – Gun Testing – Small Caliber

Activity Name	Activity Description	
New Ship Construction		
Surface Warfare Mission Package Testing – Gun Testing – Small Caliber	Vessels defend against surface targets with small-caliber guns.	
Long Description	Vessels conduct surface warfare by detecting, tracking, and prosecuting small-boat threats. The Surface Warfare Mission Package provides a layered strike/defensive capability by use of its embarked support aircraft, medium range surface-to-surface missiles, and 30 mm gun weapon system.	
Information Typical to the Event	**Platform:** Surface combatant vessels (e.g., Littoral Combat Ship) **Systems:** Small-caliber gun systems **Ordnance/Munitions:** Small-caliber projectiles (e.g., 0.50 caliber) (non-explosive) **Targets:** None **Duration:** Event duration is approximately 1 to 2 weeks, with intervals of surface warfare mission package use during this time.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles), vessel strike **Entanglement:** None **Ingestion:** Small projectile, casing	
Detailed Military Expended Material Information	Small projectiles Casings	
Assumptions Used for Analysis	500 rounds per event	

A.3.1.12 Surface Warfare Mission Package – Gun Testing – Medium Caliber

Activity Name	Activity Description	
New Ship Construction		
Surface Warfare Mission Package Testing – Gun Testing Medium Caliber	Vessels defend against surface targets with medium-caliber guns.	
Long Description	Vessels conduct surface warfare by detecting, tracking, and prosecuting small-boat threats. The surface warfare Mission Package provides a layered strike/defensive capability by use of its embarked support aircraft, medium range surface-to-surface missiles, and 30 mm gun weapon system.	
Information Typical to the Event	**Platform:** Surface Combatant Vessels **Systems:** Medium-caliber gun systems **Ordnance/Munitions:** Medium-caliber projectiles (explosive and non-explosive) **Targets:** None **Duration:** Event duration is approximately 1 to 2 weeks, with intervals of surface warfare mission package use during this time.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Weapons firing noise, vessel noise, underwater explosives (E1), **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles), vessel strike **Entanglement:** None **Ingestion:** Projectiles, casings, fragments	
Detailed Military Expended Material Information	Projectiles Casings, Fragments	
Assumptions Used for Analysis	700 explosive and 700 non-explosive rounds per event	

A.3.1.13 Surface Warfare Mission Package – Gun Testing – Large Caliber

Activity Name	Activity Description	
New Ship Construction		
Surface Warfare Mission Package Testing – Gun Testing Large Caliber	Vessels defend against surface targets with large-caliber guns.	
Long Description	Vessels conduct surface warfare by detecting, tracking, and prosecuting small-boat threats. The Surface Warfare Mission Package provides a layered strike/defensive capability by use of its embarked support aircraft, medium range surface-to-surface missiles, and 57 mm gun weapon system.	
Information Typical to the Event	**Platform:** Surface Combatant Vessels **Systems:** Large-caliber weapon systems **Ordnance/Munitions:** Large-caliber projectiles (explosive and non-explosive) **Targets:** None **Duration:** Event duration is approximately 1 to 2 weeks, with intervals of surface warfare mission package use during this time.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Weapons firing noise, vessel noise, in-air explosives **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles, fragments), vessel strike **Entanglement:** None **Ingestion:** Projectiles, fragments	
Detailed Military Expended Material Information	Casings Projectiles	
Assumptions Used for Analysis	980 explosive and 420 non-explosive rounds per event	

A.3.1.14 Surface Warfare Mission Package Testing – Missile/Rocket Testing

Activity Name	Activity Description	
New Ship Construction		
Surface Warfare Mission Package Testing – Missile/Rocket Testing	Vessels defend against surface targets with medium range missiles or rockets.	
Long Description	Vessels conduct surface warfare by detecting, tracking, and prosecuting small-boat threats. The surface warfare Mission Package provides a layered strike/defensive capability by use of its embarked support aircraft, medium range missiles or rockets, and gun weapon system.	
Information Typical to the Event	**Platform:** Surface Combatant Vessels, rotary-wing aircraft, unmanned aircraft **Systems:** None **Ordnance/Munitions:** Missiles (e.g., anti-surface) or rockets (non-explosive and explosive) **Targets:** None **Duration:** Event duration is approximately 1 to 2 weeks, with intervals of surface warfare mission package use during this time.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosives (e.g., E6), weapons firing noise, aircraft noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles and explosive fragments), aircraft strike (birds only), vessel strike **Entanglement:** None **Ingestion:** Missile or rocket fragments	
Detailed Military Expended Material Information	Missile or rocket fragments	
Assumptions Used for Analysis	Two missiles or rockets per event	

A.3.1.15 Mine Countermeasure Mission Package Testing

Activity Name	Activity Description	
New Ship Construction		
Mine Countermeasure Mission Package Testing	Vessels and associated aircraft conduct mine countermeasure operations.	
Long Description	Littoral Combat Ships conduct mine detection using unmanned submersible and aerial vehicles, magnetic and acoustic sensor systems deployed by vessel or support helicopters, and laser systems. Mines are then neutralized using magnetic, acoustic, and supercavitating systems.	
Information Typical to the Event	**Platform:** Littoral Combat Ship, Unmanned Underwater Vehicles, Rotary aircraft **Systems:** Towed sonar system **Ordnance/Munitions:** Mine neutralization systems (e.g., Airborne Mine Neutralization System) **Targets:** Floating/moored/bottom non-explosive, mines or passive mine simulation systems **Duration:** 1 to 2 weeks with intervals of mine countermeasure mission package use during this time.	**Location:** Hawaii Range Complex, Southern California Range Complex: Camp Pendleton Amphibious Assault Area; Pyramid Cove; Tanner Bank Minefield
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Towed sonar systems (e.g., HF4), underwater explosives (e.g., E4), aircraft noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike; aircraft strike (birds only) **Entanglement:** None **Ingestion:** Fragments	
Detailed Military Expended Material Information	Fragments	
Assumptions Used for Analysis	For Alternative 1: 9 events using 96 neutralizers (48 HE) For Alternative 2: 12 events using 128 neutralizers (64 HE)	

A.3.1.16 Post-Homeporting Test (All Classes)

Activity Name	Activity Description	
New Ship Construction		
Post-Homeporting Testing (All classes)	Tests electronic, navigation, and refueling capabilities.	
Long Description	Post-Homeporting testing includes Shipboard Electronic Systems Evaluation Facility measurements of antenna radiation patterns, Tactical Air Navigation certification, Identification Friend of Foe Verification, Dynamic Interface test (to validate helicopter operations), and underway replenishments.	
Information Typical to the Event	**Platform:** All classes of surface vessels **Systems:** Electronic and navigation systems **Ordnance/Munitions:** None **Targets:** None **Duration:** 1 to 5 days, depending upon the test being conducted (e.g., Shipboard Electronic Systems Evaluation Facility testing is 1 day; dynamic interface testing is 5 days).	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.2 LIFECYCLE ACTIVITIES

Testing activities are conducted throughout the lifecycle of a Navy ship to verify performance and mission capabilities. Tactical sonar system testing occurs pierside during maintenance, repair and overhaul availabilities, and at sea immediately following most major industrial periods. A Combat System Ship Qualification Trial is conducted for new ships and for ships that have undergone modification or overhaul of their combat systems.

Radar cross signature testing of surface ships is accomplished on new vessels and periodically throughout a ship's life cycle to measure how detectable the ship is to radar. Additionally, new construction, post availability, and lifecycle electromagnetic measurements of off-board electromagnetic signature are conducted for submarines.

A.3.2.1 Ship Signature Testing

Activity Name	Activity Description	
Lifecycle Activities		
Ship Signature Testing	Tests vessel and submarine radar signatures and electromagnetic countermeasures.	
Long Description	Radar cross signature testing of surface vessels is accomplished on new vessels and periodically throughout a vessel's lifecycle to measure how detectable the vessel is to radar. For example, Assessment Identification of Mine Susceptibility measurements are specific electromagnetic and passive acoustical tests performed on mine countermeasure vessels and on the Littoral Combat Ship mine countermeasure modules to determine their mine susceptibility. Additionally, measurements of deployed electromagnetic countermeasures are conducted during the new construction, post-delivery, and lifecycle phases of the acquisition process for submarines. Signature testing of all surface vessels and submarines verifies that each vessel's signature is within specifications, and may include the use of helicopter-deployed instrumentation, ship-mounted safety and navigation systems, fathometers, tracking devices, radar systems, and underwater communications equipment. Event duration includes all systems checks, including those that do not have active sonar.	
Information Typical to the Event	**Platform:** All surface vessel and submarine classes **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 20 days	**Location:** Hawaii Range Complex Pierside: Pearl Harbor, HI Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.2.2 Surface Ship Sonar Testing/Maintenance (in Operating Areas and Ports)

Activity Name	Activity Description	
Lifecycle Activities		
Surface Ship Sonar Testing/Maintenance (in Operating Areas and Ports)	Pierside and at-sea testing of surface vessel systems occurs periodically following major maintenance periods and for routine maintenance.	
Long Description	Following major and routine maintenance periods, pierside and at-sea testing and maintenance is required. Multiple systems with active and passive acoustic sources such as tactical sonar, navigation systems, fathometers, underwater communications systems, underwater distress beacons, range finders, and other similar systems, would be tested.	
Information Typical to the Event	**Platform:** All surface vessel classes **Systems:** Surface ship sonar, underwater communications **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration for each test can be up to 3 weeks, with intermittent use of active sonar.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF1K), underwater communications (e.g., MF9, MF10), acoustic countermeasures (e.g., ASW3), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Sonar would not be continuously active for the duration of the test	

A.3.2.3 Submarine Sonar Testing/Maintenance (in Operating Areas and Ports)

Activity Name	Activity Description	
Lifecycle Activities		
Submarine Sonar Testing/Maintenance (in Operating Areas and Ports)	Pierside and at-sea testing of submarine systems occurs periodically following major maintenance periods and for routine maintenance.	
Long Description	Following major and routine maintenance periods, pierside and at-sea testing and maintenance is required. Multiple systems with active and passive acoustic sources such as navigation systems, fathometers, underwater communications systems, underwater distress beacons, range finders, and other similar systems, would be tested.	
Information Typical to the Event	**Platform:** Submarine **Systems:** Submarine sonar, underwater communications, tracking pingers **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration for each test can be up to 3 weeks, with intermittent use of active sonar.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g. , HF1, HF3), mid-frequency sonar (e.g., MF3) underwater communications (e.g., M3), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Sonar would not be used continuously throughout duration of test	

A.3.2.4 Combat System Ship Qualification Trial – In-Port Maintenance Period

Activity Name	Activity Description	
Lifecycle Activities		
Combat System Ship Qualification Trial – In-Port Maintenance Period	Each combat system is tested to ensure they are functioning in a technically acceptable manner and are operationally ready to support at-sea Combat System Ship Qualification Trial events.	
Long Description	Each combat system is tested to ensure they are functioning in a technically acceptable manner and are operationally ready to support at-sea Combat System Ship Qualification Trial events. The ship's test plans and procedures, Maintenance Repair/Requirements Cards, and computerized planned maintenance system are used in establishing testing standards for each system and pieces of equipment. Vessel's crew, under supervision of subject matter experts, complete all actions and receive remedial training where required. Trouble Observation Reports are written on noted discrepancies.	
Information Typical to the Event	**Platform:** Surface combatant vessel, amphibious warfare vessel **Systems:** All combat systems **Ordnance/Munitions:** None **Targets:** None **Duration:** 3 weeks	**Location:** Pierside: Pearl Harbor, HI Pierside: San Diego, CA
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Sonar would not be continuously active for the duration of the test.	

A.3.2.5 Combat System Ship Qualification Trial – Air Defense

Activity Name	Activity Description	
Lifecycle Activities		
Combat System Ship Qualification Trial – Air Defense	Tests the vessel's capability to detect, identify, track, and successfully engage live and simulated targets.	
Long Description	Air Defense events are conducted in clear and varied electronic attack environments, using a mix of missile firings to verify the vessel's capability to detect, identify, track, and successfully engage live and simulated targets. The tests include testing the radar's track load in the presence of debris, long range engagement processing, low-elevation detection and tracking, track load in the presence of electronic attack and chaff, and missile performance.	
Information Typical to the Event	**Platform:** Surface combatant vessel, Amphibious warfare vessel **Systems:** All combat systems **Ordnance/Munitions:** Missiles (e.g., anti-air) (non-explosive and explosive), medium-caliber projectiles (non-explosive), large-caliber projectiles (explosive and non-explosive) **Targets:** Retrievable mobile targets (e.g., drones) and towed targets **Duration:** 1 week	**Location:** Hawaii Range Complex: Pacific Missile Range Facility. Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** In-air explosions, weapons firing noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive practice munitions, munition fragments), aircraft strike (birds only), vessel strike **Entanglement:** None **Ingestion:** Chaff, target fragments, medium-caliber projectiles, end caps, pistons, casings	
Detailed Military Expended Material Information	Projectiles Munition fragments Target fragments Chaff, end caps, pistons Targets Surface-to-air missiles	
Assumptions Used for Analysis	2,000 medium-caliber projectiles/event non-explosive; 20 large-caliber projectiles/event (explosive and non-explosive) 14 missiles/event (7 high-explosive) 24 canisters per event	

A.3.2.6 Combat System Ship Qualification Trial – Surface Warfare

Activity Name	Activity Description	
Lifecycle Activities		
Combat System Ship Qualification Trial – Surface Warfare	Tests shipboard sensors capabilities to detect and track surface targets, relay the data to the gun weapon system, and engage targets.	
Long Description	Surface warfare events are gun weapons system tests conducted in a clear environment to demonstrate shipboard sensors capabilities to detect and track surface targets, relay the data to the gun weapon system, and engage targets. The event qualified the vessel's surface warfare gun capability to receive track data from the sensors, filter it, calculate ballistics, recommend aim-point corrections (spots), generate gun orders, select ammunition properly for targets at differing ranges, and deliver surface direct fire on the surface targets.	
Information Typical to the Event	**Platform:** Surface combatant vessel, Amphibious warfare vessel **Systems:** Gun weapons system, Missile systems **Ordnance/Munitions:** Large-caliber projectiles (e.g., 155 mm, 5 inch) (non-explosive and explosive), medium-caliber projectiles (non-explosive), missiles (non-explosive) **Targets:** Mobile surface targets (e.g., High-Speed Maneuvering Surface Target), towed surface targets (e.g., low cost modular target) **Duration:** 1 week	**Location:** Hawaii Range Complex: Pacific Missile Range Facility Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** In-air explosives (E5), weapons firing noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive practice munitions, projectile fragments), vessel strike, in-water device strike **Entanglement:** None **Ingestion:** Medium-caliber projectiles, fragments	
Detailed Military Expended Material Information	Projectiles, munition fragments	
Assumptions Used for Analysis	Up to 300 large-caliber gun rounds/event (113 high-explosive) One surface-to-surface missile/event Up to 2,000 medium-caliber rounds/event Explosive large-caliber rounds are air-burst	

A.3.2.7 Combat System Ship Qualification Trial – Undersea Warfare

Activity Name	Activity Description	
Lifecycle Activities		
Combat System Ship Qualification Trial – Undersea Warfare	Tests vessel's ability to track and engage undersea targets.	
Long Description	Undersea warfare events are comprised of a series of tracking and firing exercises. The events ensure the operability of the undersea warfare suite and its interface with the Light Airborne Multi-Purpose System helicopter. Approximately one week of in-port training precedes exercises on an instrumented underwater range, where vessel's force becomes familiar with operation and maintenance of the undersea warfare system. Personnel then demonstrate the capability to establish the data link between the helicopter and vessel's undersea warfare system.	
Information Typical to the Event	**Platform:** Surface combatant vessel, rotary-wing aircraft **Systems:** Surface ship sonar, underwater communication systems, sonobuoys, missile systems **Ordnance/Munitions:** Non-explosive torpedoes **Targets:** Motorized autonomous targets (e.g., Expendable Mobile Anti-Submarine Warfare Training Target) **Duration:** 1 week	**Location:** Hawaii Range Complex: Pacific Missile Range Facility Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1, MF2), high-frequency sonar (e.g., HF4), helicopter-deployed dipping sonar (e.g., MF4), active sonobuoys (e.g., MF5), torpedo sonar (e.g., TORP1), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, In-water device strike, aircraft strike (birds only), military expended material strike (sonobuoys, torpedo launch accessories) **Entanglement:** Parachutes **Ingestion:** Parachutes and torpedo launch accessories	
Detailed Military Expended Material Information	Torpedo launch accessories (nose cap, suspension bands, air stabilizer, sway brace pad, arming wire, fahnstock clip, parachute) Sonobuoys Expendable targets Parachutes	
Assumptions Used for Analysis	Five targets per event All sonobuoys have a parachute unless otherwise noted Lightweight torpedoes only; no guidance wires Sonobuoys: 8 DICASS + 75 DIFAR/event	

A.3.3 SURFACE WARFARE/ANTI-SUBMARINE WARFARE TESTING

A.3.3.1 Missile Testing

Activity Name	Activity Description	
Surface Warfare/Anti-Submarine Warfare Testing		
Missile Testing	Missile testing includes various missiles fired from submarines and surface combatants.	
Long Description	Missile testing includes various missiles (e.g., standard missiles, Water Piercing Missile Launch) fired from submarines and surface combatants.	
Information Typical to the Event	**Platform:** Surface combatant vessels, submarines **Systems:** None **Ordnance/Munitions:** Missiles (e.g. anti-surface[non-explosive]) **Targets:** Unmanned surface vehicles, drones **Duration:** 1 to 2 hours	**Location:** Hawaii Range Complex: Pacific Missile Range Facility Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Weapons firing noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive practice munition), vessel strike, in-water device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Missiles	
Assumptions Used for Analysis	All targets will be recovered One surface-to-surface missile/event	

A.3.3.2 Kinetic Energy Weapon Testing

Activity Name	Activity Description	
Anti-Surface Warfare/Anti-Submarine Warfare Testing		
Kinetic Energy Weapon Testing	A kinetic energy weapon uses stored energy released in a burst to accelerate a non-explosive projectile.	
Long Description	A kinetic energy weapon uses stored energy released in a burst to accelerate a non-explosive projectile to more than seven times the speed of sound to a range of up to 200 miles.	
Information Typical to the Event	**Platform:** Surface combatant vessel **Systems:** Kinetic energy weapon **Ordnance/Munitions:** Large-caliber projectile (non-explosive) **Targets:** Recoverable or expendable floating target **Duration:** 1 day	**Location:** Hawaii Range Complex: Pacific Missile Range Facility
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Weapons firing noise, vessel noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectile), vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Expended targets and target fragments	
Assumptions Used for Analysis	40 large-caliber projectile per event Assume one expendable target/per event One event with 5,000 projectiles would occur only once before 2019.	

A.3.3.3 Electronic Warfare Testing

Activity Name	Activity Description	
Surface Warfare/Anti-Submarine Warfare Testing		
Electronic Warfare Testing	Testing will include radiation of military and commercial radar and communication systems (or simulators).	
Long Description	Testing will include radiation of military and commercial radar and communication systems (or simulators). No subsurface transmission would occur during this testing.	
Information Typical to the Event	**Platform:** Submarines **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 3 hours per day over 7 days	**Location:** Pierside: Pearl Harbor, HI Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.3.4 Torpedo (Non-Explosive) Testing

Activity Name	Activity Description	
Surface Warfare/Anti-Submarine Warfare Testing		
Torpedo (Non-explosive) Testing	Air, surface, or submarine crews employ non-explosive torpedoes against submarines or surface vessels.	
Long Description	Aerial, surface, and subsurface assets fire exercise torpedoes against surface or subsurface targets. Torpedo testing evaluates the performance and the effectiveness of hardware and software upgrades of heavyweight or lightweight torpedoes.	
Information Typical to the Event	**Platform:** Submarines, Surface combatant vessels, Fixed-wing aircraft, Rotary-wing aircraft, Support Craft/Other **Systems:** Surface vessel and submarine sonar, sonobuoys, dipping sonar **Ordnance/Munitions:** Non-explosive lightweight torpedoes, heavyweight explosive torpedoes **Targets:** Submarines, surface vessels, motorized autonomous targets (e.g., Expendable Mobile Anti-Submarine Warfare Training Target), stationary artificial targets (e.g., fleet training target) **Duration:** Up to 2 weeks	**Location:** Hawaii Range Complex: Hawaii Area Tracking System; Test area north of Maui or Penguin Bank Hawaii Range Complex: Pacific Missile Range Facility Hawaii Range Complex: Shallow Water Training Range Southern California Range Complex: Tanner/Cortes, or Southern California Anti-Submarine Warfare Range; Shore Bombardment Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g., HF1), mid-frequency sonar (e.g., MF1, MF3), helicopter-deployed sonar (e.g., MF4), active sonobuoy (e.g., MF5), torpedo sonar (e.g., TORP1, TORP2), acoustic countermeasure (e.g., ASW3, ASW4), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, aircraft strike (birds only), military expended material strike **Entanglement:** Parachutes (sonobuoy and torpedo), guidance wire **Ingestion:** Parachutes (sonobuoy and torpedo), torpedo launch accessories	
Detailed Military Expended Material Information	Sonobuoys Parachutes Expendable targets Acoustic countermeasures Torpedo launch accessories o Lightweight/heavyweight torpedo launch accessories ▪ Nose cap, suspension bands, air stabilizer, sway brace pad, arming wire,Fahnstock clip, wing kit, rocket booster, parachute, lead weights o Expended material is dependent upon torpedo fired and firing platform. o Heavyweight torpedo launch accessories ▪ Guidance wire, flex hose	
Assumptions Used for Analysis	Sonobuoys – 384 sonobuoys per year Expendable targets – one target per event Acoustic countermeasures – 356 countermeasures per year All torpedoes are recovered Assume all lightweight torpedo launch accessories have all listed material All sonobuoys have a parachute unless otherwise noted Typically, no more than eight torpedoes are fired per day during daylight hours.	

A.3.3.5 Torpedo (Explosive) Testing

Activity Name	Activity Description	
Surface Warfare/Anti-Submarine Warfare Testing		
Torpedo (Explosive) Testing	Air, surface, or submarine crews employ explosive torpedoes against artificial targets.	
Long Description	Non-explosive and explosive torpedoes (carrying a warhead) would be launched at a suspended target by a submarine and fixed- or rotary-winged aircraft or surface combatants. Torpedoes would detonate on an artificial target located at a depth between 200 and 700 ft. below the water's surface.	
Information Typical to the Event	**Platform:** Submarine, Surface combatant vessel, fixed-wing aircraft, rotary-wing aircraft, support craft/other **Systems:** None **Ordnance/Munitions:** Torpedoes (heavyweight and lightweight) (explosive and non-explosive) **Targets:** Stationary artificial targets (e.g., MK-28) **Duration:** 1 to 2 days during daylight hours. Only one heavyweight torpedo test could occur in 1 day; two heavyweight torpedo tests could occur on consecutive days. Two lightweight torpedo tests could occur in a single day.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Underwater explosion (e.g., E8, E11), torpedo sonar (e.g., TORP1, TORP2), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, aircraft strike (birds only), military expended material strike **Entanglement:** Parachutes (sonobuoy and torpedo), guidance wire **Ingestion:** Target and torpedo fragments, parachutes (sonobuoy and torpedo), torpedo launch accessories	
Detailed Military Expended Material Information	Parachutes Target fragments Sonobuoys Torpedo launch accessories o Lightweight/heavyweight torpedo launch accessories ▪ Nose cap, suspension bands, air stabilizer, sway brace pad, arming wire,Fahnstock clip, wing kit, rocket booster, parachute, lead weights o Expended material is dependent upon torpedo fired and firing platform. o Heavyweight torpedo launch accessories • Guidance wire, flex hose	
Assumptions Used for Analysis	All sonobuoys have a parachute unless otherwise noted 28 torpedoes per year (Alternatives 1 and 2) 8 high-explosive torpedoes/year 210 passive sonobuoys per event	

A.3.3.6 Countermeasure Testing

Activity Name	Activity Description	
Anti-Surface Warfare/Anti-Submarine Warfare Testing		
Countermeasure Testing	Various acoustic systems (e.g., towed arrays and surface ship torpedo defense systems) are employed to detect, localize, track, and neutralize incoming weapons.	
Long Description	Countermeasure testing involves the testing of systems that would detect, localize, and track incoming weapons. At-sea testing of the Surface Ship Torpedo Defense systems include towed acoustic systems, torpedo warning systems, and countermeasure subsystems. Some countermeasure scenarios would employ non-explosive or explosive torpedoes against targets released by secondary platforms (e.g., helicopter or submarine). While surface vessels are in transit, countermeasure systems will be used to identify false alert rates.	
Information Typical to the Event	**Platform:** Aircraft Carrier, surface combatant, submarine, fixed-wing aircraft **Systems:** Countermeasure systems **Ordnance/Munitions:** Lightweight torpedoes (non-explosive and explosive) **Targets:** Torpedo test vehicle **Duration:** Up to 7 days	**Location:** Transit Corridor Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF1), high-frequency sonar (e.g., HF5), acoustic countermeasure (e.g., ASW3), torpedo sonar (e.g., TORP1, TORP2), underwater explosives (E7), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, In-water device strike, aircraft strike (birds only) **Entanglement:** Parachute (torpedo) **Ingestion:** Torpedo launch accessories/fragments, parachutes, sonobuoys	
Detailed Military Expended Material Information	Light-weight torpedo launch accessories (nose covers, parachutes, ram plates)/fragments	
Assumptions Used for Analysis	None	

A.3.3.7 Pierside Sonar Testing

Activity Name	Activity Description	
Anti-Surface Warfare (ASUW)/Anti-Submarine Warfare (ASW) Testing		
Pierside Sonar Testing	Pierside testing to ensure systems are fully functional in a controlled pierside environment prior to at-sea test activities.	
Long Description	Ships and submarines would activate mid- and high-frequency tactical sonars, underwater communications systems, and navigational devices to ensure they are fully functional prior to at-sea test events. Event duration is 2 weeks with active sonar used intermittently over 2 days during the total event duration.	
Information Typical to the Event	**Platform:** Submarine, surface combatant **Systems:** Mid- and high-frequency sonars, underwater communications systems, countermeasure systems **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration is up to 2 weeks.	**Location:** Pearl Harbor, Hawaii San Diego, CA
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF3), high-frequency sonar (e.g., HF1, HF3), acoustic countermeasure (e.g., ASW3) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Materials Information	None	
Assumptions Used for Analysis	Event duration is 2 weeks with active sonar used intermittently over 2 days during the total event duration.	

A.3.3.8 At-Sea Sonar Testing

Activity Name	Activity Description	
Surface Warfare/Anti-Submarine Warfare Testing		
At-sea Sonar Testing	At-sea testing to ensure systems are fully functional in an open ocean environment.	
Long Description	At-sea sonar testing is required to calibrate sonar systems while the vessel or submarine is in an open ocean environment. Tests consist of electronic support measurement, photonics, and sonar sensor accuracy testing. In some instances, a submarine's passive detection capability is tested when a second submarine utilizes its active sonar or is equipped with a noise augmentation system in order to replicate acoustic or electromagnetic signatures of other vessel types or classes.	
Information Typical to the Event	**Platform:** Surface combatant vessels, Submarines **Systems:** Tactical sonar **Ordnance/Munitions:** None **Targets:** None **Duration:** 4 hours to 11 days	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF3), high-frequency sonar (e.g., HF1, HF3), acoustic countermeasure (e.g., ASW4), vessel noise, acoustic modem (e.g., M3) **Energy:** None **Physical Disturbance and Strike:** Vessel strike, military expended material strike (acoustic countermeasures) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Acoustic countermeasures	
Assumptions Used for Analysis	Active sonar use is intermittent throughout the duration of the event Acoustic countermeasures – 10 per event	

A.3.4 MINE WARFARE TESTING

A.3.4.1 Mine Detection and Classification

Activity Name	Activity Description	
Mine Warfare Testing		
Mine Detection and Classification Testing	Air, surface, and subsurface vessels detect and classify mines and mine-like objects.	
Long Description	Mine detection and classification systems require testing to evaluate the capability of generating underwater magnetic and acoustic signature fields capable of sweeping a wide range of threat mines at tactically significant water depths, ranging from the surf zone to deep water. In order to develop better and safer methods of minesweeping, the Navy is currently testing new systems to detect, locate, and identify mines including a laser airborne mine detection system that uses laser illumination coupled with sensitive electro-optic receivers to find mines in the upper part of the water column. This type of equipment is currently designed for operation from a manned helicopter; however, the next generation of such equipment is expected to operate from unmanned aerial vehicles.	
Information Typical to the Event	**Platform:** Rotary-wing aircraft, unmanned aerial systems, surface combatant vessels, amphibious warfare vessels, remotely operated vehicles **Systems:** Mine detection and classification systems **Ordnance/Munitions:** None **Targets:** Floating/moored/bottom non-explosive mines or passive mine simulation systems **Duration:** Up to 10 days	**Location:** Hawaii Range Complex Hawaii Range Complex: Kahoolawe Training Minefield Southern California Range Complex Southern California Range Complex: Mission Bay Training Minefield
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g., HF1), vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Laser systems also used during testing	

A.3.4.2 Mine Countermeasure/Neutralization Testing

Activity Name	Activity Description	
Mine Warfare (MIW) Testing		
Mine Countermeasure/ Neutralization Testing	Air, surface, and subsurface vessels neutralize threat mines that would otherwise restrict passage through an area.	
Long Description	Mine countermeasure/neutralization testing is required to ensure systems can effectively neutralize threat mines that would otherwise restrict passage through an area. Countermeasure systems are deployed from surface ships and helicopters to neutralize mines a number of ways: cutting mooring cables of buoyant mines, producing medium- to high-frequency acoustic energy that fires acoustic-influence mines, producing electrical energy to replicate the magnetic signatures of surface ships in order to detonate threat mines, detonation of mines using remotely-operated vehicles such as the Archerfish Common Neutralizer, and using explosive charges or supercavitating projectiles to destroy threat mines.	
Information Typical to the Event	**Platform:** Surface combatant ship, rotary-wing aircraft, remotely operated vehicles **Systems:** Mine neutralization systems **Ordnance/Munitions:** Mine neutralization systems; explosive mines **Targets:** Floating/moored/bottom non-explosive and explosive mines and mine simulation systems **Duration:** Event duration ranges from 1 to 10 days, with intermittent use of countermeasure/neutralization systems during this period.	**Location:** Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mine countermeasure systems (e.g., HF4, M3), underwater explosives (e.g., E4, E8), vessel noise, aircraft noise **Energy:** Electromagnetic minesweeping systems **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only), seafloor device strike (mine shapes) **Entanglement:** Fiber-optic cable **Ingestion:** Target fragments	
Detailed Military Expended Material Information	Target fragments, fiber-optic cable	
Assumptions Used for Analysis	**Other Sensors:** Mine countermeasures systems (e.g., AN/AWS-2 Rapid Airborne Mine Clearance System, AN/ALQ-220 Organic Airborne and Surface Influence Sweep)	

A.3.4.3 Pierside Systems Health Checks

Activity Name	Activity Description	
Mine Warfare Testing		
Pierside Systems Health Checks	Mine warfare systems are tested in pierside locations to ensure acoustic and electromagnetic sensors are fully functional prior to at-sea test activities.	
Long Description	Mine warfare systems are tested in pierside locations to ensure acoustic and electromagnetic sensors are fully functional prior to at-sea test activities. Systems that are tested pierside include mine hunting and localization sonar, electromagnetic mine neutralization systems, and navigation systems.	
Information Typical to the Event	**Platform:** Surface combatant vessel **Systems:** Mine detection systems **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration is up to 5 days, with systems being tested independently and periodically (not continuously) during the total event duration.	**Location:** Pierside: San Diego, CA
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.5 SHIPBOARD PROTECTION SYSTEMS AND SWIMMER DEFENSE TESTING

A.3.5.1 Pierside Integrated Swimmer Defense

Activity Name	Activity Description	
Shipboard Protection Systems and Swimmer Defense Testing		
Pierside Integrated Swimmer Defense	Swimmer defense testing ensures that systems can effectively detect, characterize, verify, and engage swimmer/diver threats in harbor environments.	
Long Description	Swimmer defense testing includes testing of systems to determine if they can effectively detect, characterize, verify, and engage swimmer/diver threats in harbor environments. Swimmer and diver threats are detected with high frequency sonar. The threats are then warned to exit the water through the use of underwater voice communications. If the threat does not comply, non-lethal diver deterrent air guns are used against the threat. Surface loudhailers are also used during the test.	
Information Typical to the Event	**Platform:** Support Craft/Other **Systems:** High-frequency sonar; airguns surface loudhailers **Ordnance/Munitions:** None **Targets:** None **Duration:** 14 days with intermittent periods of use for each system during this time.	**Location:** Pierside: San Diego, CA
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Low-frequency sonar (e.g., LF4), mid-frequency sonar (e.g., MF8), swimmer defense sonar (e.g., SD1), airguns (e.g., AG) **Energy:** None **Physical Disturbance and Strike:** Seafloor device strike (swimmer defense tripod) **Entanglement:** None **Ingestion:** None	
Military Expended Material	None	
Assumptions Used for Analysis	**Other Sensors:** Surface ship protection systems (e.g., communications systems, loudhailers, swimmer deterrents)	

A.3.5.2 Shipboard Protection Systems Testing

Activity Name	Activity Description	
Shipboard Protection Systems and Swimmer Defense Testing		
Shipboard Protection Systems Testing	Various systems are used to protect surface combatants from various threats.	
Long Description	Surface vessels engage small boat threats through the use of spotlights and loudhailers (pierside) but can also include the use of 0.50 cal guns (at-sea).	
Information Typical to the Event	**Platform:** Surface combatant vessels **Systems:** None **Ordnance/Munitions:** Small-caliber projectiles (e.g., 0.50 caliber [non-explosive]) **Targets:** Floating target, rigid-hull inflatable boat **Duration:** 10 days	**Location:** Pierside: San Diego, CA Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, weapons firing noise **Energy:** None **Physical Disturbance and Strike:** Military expended material strike (non-explosive projectiles), vessel strike **Entanglement:** None **Ingestion:** Small-caliber projectiles, casings	
Detailed Military Expended Material Information	Casings Projectiles Target fragments	
Assumptions Used for Analysis	Small-caliber rounds will not be used pierside	

A.3.5.3 Chemical/Biological Simulant Testing

Activity Name	Activity Description	
Shipboard Protection Systems and Swimmer Defense Testing		
Chemical/Biological Simulant Testing	Chemical/biological agent simulants are deployed against surface ships.	
Long Description	Chemical or biological agent simulants are deployed against surface vessels to verify the integrity of the vessel's defense system including installed detection, protection, and decontamination systems. Methods of simulant delivery include aerial dispersal and by hand-held spray.	
Information Typical to the Event	**Platform:** Surface combatant vessels, fixed-wing aircraft **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 3 days	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vessel noise, aircraft noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike, aircraft strike (birds only) **Entanglement:** None **Ingestion:** Simulants	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Examples of Chemical Simulants: glacial acetic acid, triethyl phosphate Examples of Biological Simulants: spore-forming bacteria, non-spore-forming bacteria, the protein ovalbumin, MS2 bacteriophages, and the fungus *Aspergillus niger*	

A.3.6 UNMANNED VEHICLE TESTING

A.3.6.1 Underwater Deployed Unmanned Aerial Vehicle Testing

Activity Name	Activity Description	
Unmanned Vehicle Testing		
Underwater Deployed Unmanned Aerial Vehicle Testing	Submarines launch unmanned aerial vehicles while submerged.	
Long Description	During testing, a negatively buoyant capsule is deployed underwater and descends to a programmed depth. The capsule then drops a weight, inflates a flotation collar, rises to the surface, and launches an unmanned aerial system. Personnel use radio frequency communications to control and communicate with the unmanned aerial system during its flight.	
Information Typical to the Event	**Platform:** Submarine **Systems:** Unmanned aerial systems **Ordnance/Munitions:** None **Targets:** None **Duration:** 8 hours (4 hours/day over 2 days)	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** None **Energy:** None **Physical Disturbance and Strike:** Vessel strike, in-water device strike (unmanned aerial system launch), aircraft strike (birds only) **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Expandable capsule (with flotation collar) Ballast weights	
Assumptions Used for Analysis	None	

A.3.6.2 Unmanned Vehicle Development and Payload Testing

Activity Name	Activity Description	
Unmanned Vehicle Testing		
Unmanned Vehicle Development and Payload Testing	Vehicle development involves the production and upgrade of new unmanned platforms on which to attach various payloads used for different purposes.	
Long Description	Vehicle development involves the production and upgrade of new unmanned platforms on which to attach various payloads used for different purposes. Platforms can include unmanned underwater vehicles, unmanned surface vehicles, and unmanned aerial systems. Payload testing assesses various systems that can be incorporated onto unmanned platforms for mine warfare, bottom mapping, and other missions. Tests range from basic remote control and autonomous navigation tests to deployment and activation of onboard systems which may include hydrodynamic instruments, launchers, and recovery capabilities. These vehicles are capable of expanding the communication and surveillance capabilities of submarines, surface vessels, and terrestrial commands.	
Information Typical to the Event	**Platform:** Unmanned vehicles (underwater, surface, and aerial), Support Craft/Other **Systems:** Unmanned vehicle sonar systems **Ordnance/Munitions:** None **Targets:** None **Duration:** Event duration for unmanned vehicles with traditional propulsion typically lasts up to 40 hours. Some propulsion systems (e.g., gliders) could operate continuously for multiple months.	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency sonar (e.g., MF9), high-frequency sonar (e.g., SAS2), vessel noise **Energy:** None **Physical Disturbance and Strike:** In-water device strike, seafloor device (bottom crawling vehicles), vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.3.7 OTHER TESTING

A.3.7.1 Special Warfare

Activity Name	Activity Description	
Other Testing		
Special Warfare	Special warfare includes testing of submersibles capable of inserting and extracting personnel and payloads into denied areas from strategic distances.	
Long Description	Special warfare includes testing of submersibles capable of inserting and extracting personnel and payloads into denied areas from strategic distances. Testing could include the use of special operations forces deployed from submerged submarines while at sea.	
Information Typical to the Event	**Platform:** Surface craft/other, submarines **Systems:** Submarine sonar, Doppler sonar, side scan sonar, underwater communications **Ordnance/Munitions:** None **Targets:** None **Duration:** Up to 30 days	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g., HF1), acoustic modem (M3), underwater communications (e.g., MF9), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Test will not occur constantly throughout duration	

A.3.7.2 Acoustic Communications Testing

Activity Name	Activity Description	
Other Testing		
Acoustic Communications Testing	Acoustic modems, submarines, and surface vessels transmit signals to communicate.	
Long Description	Acoustic communications testing can include transmission of low-, mid-, and high-frequency signals between acoustic modems, submarines, sub and surface vessels, vessels and shore, and between surface vessels and mines.	
Information Typical to the Event	**Platform:** Surface ships, submarines **Systems:** None **Ordnance/Munitions:** None **Targets:** None **Duration:** 12 hours	**Location:** Hawaii Range Complex Southern California Range Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** High-frequency sonar (e.g., HF1), acoustic communication (e.g., M3), vessel noise **Energy:** None **Physical Disturbance and Strike:** Vessel strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

A.4 SPACE AND NAVAL WARFARE SYSTEMS COMMAND TESTING EVENTS

The mission of Space and Naval Warfare Systems Command is to acquire, develop, deliver, and sustain decision superiority for the warfighter at the right time and for the right cost. Space and Naval Warfare Systems Center Pacific is the research and development part of Space and Naval Warfare Systems Command focused on developing and transitioning technologies in the area of command, control, communications, computers, intelligence, surveillance, and reconnaissance for the Navy. Space and Naval Warfare Systems Command and Space and Naval Warfare Systems Center Pacific conduct research, development, test, and evaluation projects to support emerging technologies for intelligence, surveillance, and reconnaissance, anti-terrorism and force protection, mine countermeasures, anti-submarine warfare, oceanographic research, remote sensing, and communications. These activities include, but are not limited to, the testing of unmanned undersea and surface vehicles, a wide variety of sensor systems, underwater surveillance technologies, and underwater communications.

A.4.1 RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

A.4.1.1 Autonomous Undersea Vehicle Anti-Terrorism/Force Protection Mine Countermeasures

Activity Name	Activity Description	
Autonomous Undersea Vehicle Anti-Terrorism/Force Protection Mine Countermeasures		
Autonomous Undersea Vehicle Anti-Terrorism/Force Protection Mine Countermeasures	Testing of unmanned undersea vehicles with mine hunting sensors in marine environments in and around rocky outcroppings. Anti-terrorism/force protection mine countermeasures testing is focused on mine countermeasure missions in confined areas between piers and pilings.	
Long Description	Autonomous undersea vehicle shallow water mine countermeasure testing is focused on the testing of unmanned undersea vehicles with mine hunting sensors in marine environments in and around rocky outcroppings. Anti-terrorism/force protection mine countermeasures testing are focused on mine countermeasure missions in confined areas between piers and pilings. It provides training to Navy personnel on how to deploy, detect, and defend against mine systems and underwater improvised explosive devices.	
Information Typical to the Event	**Platform:** Autonomous Undersea Vehicle **Systems:** Mine hunting sensors, synthetic aperture sonar (e.g., SAS1, SAS2, SAS3) **Ordnance/Munitions:** None **Targets:** Mine Shapes **Duration:** Typically 5 days of daily operations for 6 hours per day	**Location:** Hawaii Range Complex: Oahu, Hawaii Southern California Range Complex : San Diego Bay, Camp Pendleton Amphibious Assault Area, San Clemente Island Operating Areas Silver Strand Training Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Synthetic aperture sonar; (e.g., SAS1, SAS2, SAS3) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	San Diego Bay vehicle depth shallow and slow moving. All other areas are deeper water with the vehicle moving approximately 3 to 4 knots near the sea floor. It may also include glider operations in the San Clemente Island Operating Area and open ocean. Conducted in multiple marine environments within HSTT study to include San Clemente Island Operating Area, Silver Strand Training Complex, and in and around rocky outcroppings and between Naval piers, pilings, and ships.	

A.4.1.2 Autonomous Undersea Vehicle Underwater Communications

Activity Name	Activity Description	
Underwater Communications		
Autonomous Undersea Vehicle Underwater Communications	This testing is focused on providing two-way networked communications below the ocean surface while maintaining mission profile.	
Long Description	This testing is focused on providing two-way networked communications below the ocean surface while maintaining mission profile. The goal of this testing is to enable two-way communications during missions that require Autonomous Underwater Vehicles to remain submerged to minimize counter-detection and maximize tactical positioning.	
Information Typical to the Event	**Platform:** Autonomous Underwater Vehicle **Systems:** Acoustic modems (e.g., M3) **Ordnance/Munitions:** None **Targets:** Mine Shapes **Duration:** Typically 5 days of daily operations for 6 hours per day	**Location:** Hawaii Range Complex: Oahu, Hawaii Southern California Range Complex: San Diego Bay, Camp Pendleton Amphibious Assault Area, San Clemente Island Operating Areas Silver Strand Training Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Acoustic modems (e.g., M3) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	San Diego Bay vehicle depth shallow and slow moving. All other areas are deeper water with the vehicle moving approximately 3 to 4 knots near the sea floor. It may also include glider operations in the San Clemente Island Operating Area and open ocean. Conducted in multiple marine environments within HSTT study to include San Clemente Island Operating Area, Silver Strand Training Complex, and in and around rocky outcroppings and between Naval piers, pilings, and ships.	

A.4.1.3 Fixed System Underwater Communications

Activity Name	Activity Description	
Underwater Communications		
Fixed System Underwater Communications	Fixed underwater communications systems testing is focused on testing stationary or free floating equipment that provides two-way networked communications below the ocean surface while maintaining mission profile.	
Long Description	Fixed underwater communications systems testing is focused on testing stationary or free floating equipment that provides two-way networked communications below the ocean surface while maintaining mission profile. The goal of this testing is to enable two-way communications during missions that require the fixed sensor to remain submerged to minimize counter-detection and maximize tactical positioning. Typical tests last 5 days of 8 hours testing per day.	
Information Typical to the Event	**Platform:** Fixed systems **Systems:** Acoustic modem (e.g., M3) **Ordnance/Munitions:** None **Targets:** None **Duration:** Typically 5 days of daily operations for 6–8 hours per day	**Location:** SOCAL Range Complex: San Diego Bay, San Clemente Island Operating Areas Silver Strand Training Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Acoustic modem (e.g., M3) **Energy:** None **Physical Disturbance and Strike:** Military expended material strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Clump anchors and/or sand bags Expendable communications buoys	
Assumptions Used for Analysis	Fixed or free floating, stationary source	

A.4.1.4 Autonomous Oceanographic Research and Meteorology and Oceanography

Activity Name	Activity Description	
Autonomous Oceanographic Research and Meteorology and Oceanography		
Autonomous Oceanographic Research and Meteorology and Oceanography (METOC)	The research is comprised of ocean gliders and autonomous undersea vehicles. Gliders are portable, long-endurance buoyancy driven vehicles that provide a means to sample and characterize ocean water properties. Autonomous undersea vehicles are larger, shorter endurance vehicles.	
Long Description	The research is comprised of ocean gliders and autonomous undersea vehicles. Gliders are portable, long-endurance (weeks to months), buoyancy driven vehicles that provide a low-cost, semi-autonomous, and highly persistent means to sample and characterize the ocean water column properties at spatial and temporal resolutions. Autonomous undersea vehicles are larger, shorter endurance (hours to days), conventionally powered (typically electric motor) vehicles that will increase the spatial extent and resolution of the bathymetry, imagery data, conductivity, temperature and depth data, and optical data.	
Information Typical to the Event	**Platform:** Ocean glider, Autonomous Undersea Vehicles **Systems:** Vehicle tracking systems (e.g., HF6) **Ordnance/Munitions:** None **Targets:** None **Duration:** Typically 5 days of daily operations for 6 hours per day	**Location:** Hawaii Range Complex: Oahu, Hawaii SOCAL Range Complex: San Diego Bay, Camp Pendleton Amphibious Assault Area, San Clemente Island Operating Area Silver Strand Training Complex
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Vehicle tracking systems (e.g., HF6) **Energy:** None **Physical Disturbance and Strike:** In-water device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	San Diego Bay vehicle depth shallow and slow moving. All other areas are deeper water with the vehicle moving approximately 3 to 4 knots near the sea floor. It may also include glider operations in the San Clemente Island Operating Area and open ocean. Conducted in multiple marine environments within HSTT study to include San Clemente Island Operating Area, Silver Strand Training Complex, and in and around rocky outcroppings and between Naval piers, pilings, and ships.	

A.4.1.5 Fixed Autonomous Oceanographic Research and Meteorology and Oceanography

Activity Name	Activity Description	
Autonomous Oceanographic Research and Meteorology and Oceanography		
Fixed Autonomous Oceanographic Research and Meteorology and Oceanography	The goal of these systems is to develop, integrate, and demonstrate deployable autonomous undersea technologies that improve the Navy's capability to conduct effective anti-submarine warfare and intelligence, surveillance, and reconnaissance operations in littoral waters.	
Long Description	The goal of these systems is to develop, integrate, and demonstrate deployable autonomous undersea technologies that improve the Navy's capability to conduct effective anti-submarine warfare and intelligence, surveillance, and reconnaissance operations in littoral waters. Fixed systems are portable, long-endurance (weeks to months), that provide a low-cost, semi-autonomous, and highly persistent means to sample and characterize the ocean water column properties at spatial and temporal resolutions. Acoustic releases would be used for the recovery of the hardware.	
Information Typical to the Event	**Platform:** Fixed systems **Systems:** Acoustic releases **Ordnance/Munitions:** None **Targets:** None **Duration:** Typically 5 days of daily operations for 8 hours per day	**Location:** Silver Strand Training Complex/Imperial Beach/Point Loma San Clemente Island Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Acoustic releases **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Clump anchors and/or sand bags	
Assumptions Used for Analysis	Fixed stationary source	

A.4.1.6 Passive Mobile Intelligence, Surveillance, and Reconnaissance Sensor Systems

Activity Name	Activity Description	
Intelligence, Surveillance, and Reconnaissance (ISR) Sensor Systems		
Passive Mobile Intelligence, Surveillance, and Reconnaissance Sensor Systems	These systems use passive arrays hosted by surface and subsurface vehicles and vessels for conducting submarine detection and tracking experiments and demonstrations.	
Long Description	These systems use passive arrays hosted by surface and subsurface vehicles and vessels for conducting submarine detection and tracking experiments and demonstrations. The arrays, which are composed of hydrophones to receive acoustic energy radiated by targets of interest, are deployed by surface ships. The unmanned undersea vehicles and associated systems are monitored and controlled by operators stationed aboard another vessel or at a land-based remote host station. The arrays are tested to evaluate various system performance parameters and requirements. Surrogate quiet submarine threats are provided by low-frequency towed projectors as well as existing Fleet assets such as underwater autonomous mobile acoustic sources.	
Information Typical to the Event	**Platform:** Surface or subsurface vehicle **Systems:** Towed sound projector with passive towed arrays **Ordnance/Munitions:** None **Targets:** sub-surface vessels **Duration:** Typically 5 days of daily operations for 8 hours per day	**Location:** Silver Strand Training Complex/Imperial Beach/Point Loma San Clemente Island Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Towed sound projector (e.g., LF5) **Energy:** None **Physical Disturbance and Strike:** In-water device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Towed moving source in the water column	

A.4.1.7 Fixed Intelligence, Surveillance, and Reconnaissance Sensor Systems

Activity Name	Activity Description	
Intelligence, Surveillance, and Reconnaissance (ISR) Sensor Systems		
Fixed Intelligence, Surveillance, and Reconnaissance Sensor Systems	These systems use stationary fixed arrays for conducting submarine detection and tracking experiments and demonstrations.	
Long Description	These systems use stationary fixed passive arrays for conducting submarine detection and tracking experiments and demonstrations. The arrays are composed of passive hydrophones to receive acoustic energy radiated by targets of interest. Surrogate threats are provided by low frequency towed projectors. This type of testing may also include free floating sensor systems such as buoys, sonobuoys, and other types of sensors floating on the surface or suspended in the water column.	
Information Typical to the Event	**Platform:** Fixed and free floating arrays **Systems:** Towed sound source and free floating buoys **Ordnance/Munitions:** None **Targets:** sub-surface vessels **Duration:** Typically 5 days of daily operations for 6–8 hours per day	**Location:** Hawaii Operating Area Silver Strand Training Complex/Imperial Beach/Point Loma San Clemente Island Operating Area
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Towed sound source and free floating buoys (e.g., MF9, HF6, LF4, LF5, LF6 **Energy:** None **Physical Disturbance and Strike:** In-water device strike **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	Steel framework in deep water only (one per every 5 years)	
Assumptions Used for Analysis	Towed moving and free floating source in the water column	

A.4.1.8 Anti-Terrorism/Force Protection Fixed Sensor Systems

Activity Name	Activity Description	
Anti-Terrorism/Force Protection		
Fixed Sensor Systems	These systems are for Anti-Terrorism/Force Protection operations in navy ports and bays	
Long Description		
Information Typical to the Event	**Platform:** Fixed system **Systems:** Mid-frequency active source **Ordnance/Munitions:** None **Targets:** Sub-surface objects of interest **Duration:** Typically 5 days of daily operations for 8 hours per day	**Location:** San Diego Bay
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Mid-frequency active source (e.g., MF 9) **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	Fixed stationary source above sea bottom	

A.5 OFFICE OF NAVAL RESEARCH AND NAVAL RESEARCH LABORATORY TESTING ACTIVITIES

As the Department of the Navy's Science and Technology provider, the Office of Naval Research and the Naval Research Laboratory provide technology solutions for Navy and Marine Corps needs. The Office of Naval Research's mission, as defined by law, is to plan, foster, and encourage scientific research in recognition of its paramount importance as related to the maintenance of future naval power, and the preservation of national security. Further, the Office of Naval Research manages the Navy's basic, applied, and advanced research to foster transition from science and technology to higher levels of research, development, test and evaluation.

The Ocean Battlespace Sensing Department explores science and technology in the areas of oceanographic and meteorological observations, modeling and prediction in the battlespace environment; submarine detection and classification (anti-submarine warfare); and mine warfare applications for detecting and neutralizing mines in both the ocean and littoral environment. Office of Naval Research events include: research, development, test and evaluation activities; surface processes acoustic communications experiments; shallow water acoustic communications experiments; sediment acoustics experiments; shallow water acoustic propagation experiments; and long range acoustic propagation experiments.

A.5.1 RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

A.5.1.1 Kauai Acoustic Communications Experiment (Coastal)

Activity Name	Activity Description	
RDT&E Testing		
Kauai Acoustic Communications Experiment (Coastal)	The primary purpose of the Kauai Acoustic Communications Experiment is to collect acoustic and environmental data appropriate for studying the coupling of oceanography, acoustics, and underwater communications.	
Long Description	The primary purpose of the Kauai acoustic communications experiment is to collect acoustic and environmental data appropriate for studying the coupling of oceanography, acoustics, and underwater communications. A specific experimental interest is obtaining data that would relate the impact of a fluctuating oceanographic environment and source/receiver motion to fluctuations in the waveguide acoustic impulse response between multiple sources and receivers. These data would ultimately provide insight into the design and performance of shallow underwater systems for acoustic digital data communications. The focus is on fluctuations over scales of a few seconds to a few tens of seconds that directly affect the reception of a data packet and the variability of packet-to-packet reception. These experiments involve the use of underwater acoustic sources to collect acoustic and environmental data appropriate for studying the coupling of oceanography, acoustics, and underwater communications.	
Information Typical to the Event	**Platform:** UNOLS ship R/V Kilo Moana **Systems:** Research and Enviro Sensing **Ordnance/Munitions:** None **Targets:** None **Duration:** 1-2 weeks	**Location:** Hawaii Range Complex: Pacific Missile Range Facility (Warning Areas -72B, and 386 [Air D, G, H, and K])
Potential Impact Concerns *(Information regarding deconstruct categories and stressors)*	**Acoustic:** Acoustic Doppler Current Profiler (ADCP [DS1]) Upward-looking RDI Workhorse Sentinel 300 kHz ADCP. ITC-1001 transducers, ITC-1032 transducers, ITC-1007 transducers **Energy:** None **Physical Disturbance and Strike:** None **Entanglement:** None **Ingestion:** None	
Detailed Military Expended Material Information	None	
Assumptions Used for Analysis	None	

Appendix B: Federal Register Notices

proposed information collection; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology. The Office of Management and Budget (OMB) has approved this information collection requirement for use through November 30, 2010. DoD proposes that OMB extend its approval for these collections to expire three years after the approval date.

DATES: DoD will consider all comments received by September 13, 2010.

ADDRESSES: You may submit comments, identified by OMB Control Number 0704–0252, using any of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *E-mail: dfars@acq.osd.mil.* Include OMB Control Number 0704–0252 in the subject line of the message.
- *Fax:* (703) 602–0350.
- *Mail:* Defense Acquisition Regulations System, Attn: Ms. Meredith Murphy, OUSD(AT&L)DPAP(DARS), 3060 Defense Pentagon, Room 3B855, Washington, DC 20301–3060.

Comments received generally will be posted without change to *http://www.regulations.gov*, including any personal information provided.

FOR FURTHER INFORMATION CONTACT: Ms. Meredith Murphy, 703–602–1302. The information collection requirements addressed in this notice are available electronically via the Internet at: *http://www.acq.osd.mil/dp/dars/dfars.html.*

Paper copies are available from Ms. Meredith Murphy, OUSD(AT&L)DPAP(DARS), 3060 Defense Pentagon, Room 3B855, Washington, DC 20301–3060.

SUPPLEMENTARY INFORMATION:

Title, Associated Form, and OMB Number: Defense Federal Acquisition Regulation Supplement (DFARS) Part 251, Contractor Use of Government Supply Sources, and the associated clauses at DFARS 252.251–7000, Ordering from Government Supply Sources; and 252.251–7001, Use of Interagency Fleet Management System (IFMS) Vehicles and Related Services; OMB Control Number 0704–0252.

Needs and Uses: This information collection permits contractors to—

- Place orders under Federal Supply Schedule contracts and requirements contracts or for Government stock. The information enables DoD to evaluate whether a contractor is authorized to place such orders.
- Submit requests for use of Government vehicles under the Interagency Fleet Management System (IFMS) and obtain related services. The information submitted enables DoD to evaluate whether the contractor is authorized such use.

Affected Public: Businesses or other for-profit and not-for-profit institutions.

Annual Burden Hours: 5,250.

Number of Respondents: 3,500.

Responses per Respondent: approximately 3.

Annual Responses: 10,500.

Average Burden per Response: approximately 30 minutes.

Frequency: On occasion.

Summary of Information Collection

The clause at DFARS 252.251–7000, Ordering from Government Supply Sources, requires a contractor to provide a copy of an authorization when placing an order under a Federal Supply Schedule, a Personal Property Rehabilitation Price Schedule, or an Enterprise Software Agreement.

The clause at DFARS 252.251–7001, Use of Interagency Fleet Management System Vehicles and Related Services, requires a contractor to submit a request for use of Government vehicles when the contractor is authorized to use such vehicles in the performance of Government contracts.

Ynette R. Shelkin,

Editor, Defense Acquisition Regulations System.

[FR Doc. 2010–17256 Filed 7–14–10; 8:45 am]

BILLING CODE 5001–08–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent To Prepare an Environmental Impact Statement and Overseas Environmental Impact Statement for Navy Hawaii-Southern California Training and Testing and To Announce Public Scoping Meetings

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality Regulations (40 Code of Federal Regulations [CFR] Parts 1500–1508), and Executive Order 12114, the Department of the Navy (DON) announces its intent to prepare an Environmental Impact Statement (EIS) and Overseas EIS (OEIS) to evaluate the potential environmental effects associated with military readiness training and research, development, testing, and evaluation (RDT&E) activities (hereinafter referred to as "training and testing" activities) conducted within the Hawaii-Southern California Training and Testing (HSTT) study area. The HSTT study area combines the at-sea portions of the Hawaii Range Complex, the Southern California Range Complex (including the San Diego Bay); the Silver Strand Training Complex; areas where vessels transit between the Hawaii Range Complex and the Southern California Range Complex; and select Navy pierside locations. This EIS and OEIS is being prepared to renew and combine current regulatory permits and authorizations; address current training and testing not covered under existing permits and authorizations; and to obtain those permits and authorizations necessary to support force structure changes and emerging and future training and testing requirements.

The DON will invite the National Marine Fisheries Service to be a cooperating agency in preparation of this EIS and OEIS.

DATES AND ADDRESSES: Six public scoping meetings will be held between 4 p.m. and 8 p.m., unless otherwise stated, on the following dates and at the following locations:

1. Wednesday, August 4, 2010, 3:30 p.m. to 7:30 p.m., Point Loma/Hervey Branch Library, Community Room, 3701 Voltaire Street, San Diego, CA.
2. Thursday, August 5, 2010, Lakewood High School, Room 922/924, 4400 Briercrest Avenue, Lakewood, CA.
3. Tuesday, August 24, 2010, Kauai Community College Cafeteria, 3–1901 Kaumuali'i Highway, Lihue, HI.
4. Wednesday, August 25, 2010, Disabled American Veterans Hall, Weinberg Hall, 2685 North Nimitz Highway, Honolulu, HI.
5. Thursday, August 26, 2010, Hilo High School Cafeteria, 556 Waianuenue Avenue, Hilo, HI.
6. Friday, August 27, 2010, Maui Waena Intermediate School Cafeteria, 795 Onehee Avenue, Kahului, HI.

Each of the six scoping meetings will consist of an informal, open house session with informational stations staffed by DON representatives. Meeting details will be announced in local newspapers. Additional information concerning meeting times is available on the EIS and OEIS Web page located at: *http://www.HawaiiSOCALEIS.com.*

FOR FURTHER INFORMATION CONTACT: Kent Randall, Naval Facilities Engineering Command, Southwest. Attention: HSTT EIS/OEIS, 1220 Pacific Highway, Building 1, Floor 5, San Diego, CA

92132, or Meghan Byrne, Naval Facilities Engineering Command, Pacific. Attention: HSTT EIS/OEIS, 258 Makalapa Dr, Ste 100, Building 258, Floor 3, Room 258C210, Pearl Harbor, HI 96860–3134.

SUPPLEMENTARY INFORMATION: The DON's proposed action is to conduct training and testing activities that include the use of active sonar and explosives within the at-sea portions of existing DON training range complexes around the Hawaiian Islands and off the coast of Southern California (known as the HSTT study area). While the majority of these training and testing activities take place in operating and warning areas and/or on training and testing ranges, some training activities, such as sonar maintenance and gunnery exercises, are conducted concurrent with normal transits and may occur outside of DON operating and warning areas.

The HSTT study area combines the at-sea portions of the following range complexes: Hawaii Range Complex, Southern California Range Complex, and Silver Strand Training Complex. The existing western boundary of the Hawaii Range Complex is being expanded 60 miles to the west to the International Dateline. The HSTT study area also includes the transit route between Hawaii and Southern California as well as DON and commercial piers at Pearl Harbor, HI and San Diego, CA where sonar may be tested.

The proposed action is to conduct military training and testing activities in the HSTT study area. The purpose of the proposed action is to achieve and maintain Fleet Readiness to meet the requirements of Title 10 of the U.S. Code, which requires DON to "maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas." The proposed action would also allow DON to attain compliance with applicable environmental authorizations, consultations, and other associated environmental requirements, including those associated with new platforms and weapons systems, for example, the Low Frequency Anti-Submarine Warfare capability associated with the Littoral Combat Ship.

The alternatives that will be analyzed in the HSTT EIS and OEIS meet the purpose and need of the proposed action by providing the level of training that meets the requirements of Title 10, thereby ensuring that Sailors and Marines are properly prepared for operational success. Similarly, the level of RDT&E proposed for the HSTT study area is necessary to ensure that Sailors and Marines deployed overseas have the latest proven military equipment. Accordingly, the alternatives to be addressed in the HSTT EIS and OEIS are:

1. No Action—The No Action Alternative continues baseline training and testing activities and force structure requirements as defined by existing DON environmental planning documents. This documentation includes the Records of Decision for the Hawaii and Southern California range complexes and the Preferred Alternative for the Silver Strand Training Complex Draft EIS and OEIS.

2. Alternative 1—This alternative consists of the No Action alternative, plus expansion of the overall study area boundaries, and updates and/or adjustments to locations and tempo of training and testing activities. This alternative also includes changes to training and testing requirements necessary to accommodate force structure changes, and the development and introduction of new vessels, aircraft, and weapons systems.

3. Alternative 2—Alternative 2 consists of Alternative 1 with an increased tempo of training and testing activities. This alternative also allows for additional range enhancements and infrastructure requirements.

Resource areas that will be addressed because of the potential effects from the proposed action include, but are not limited to: Ocean and biological resources (including marine mammals and threatened and endangered species); air quality; airborne soundscape; cultural resources; transportation; regional economy; recreation; and public health and safety.

The scoping process will be used to identify community concerns and local issues to be addressed in the EIS and OEIS. Federal agencies, state agencies, local agencies, Native American Indian Tribes and Nations, the public, and interested persons are encouraged to provide comments to the DON to identify specific issues or topics of environmental concern that the commenter believes the DON should consider. All comments provided orally or in writing at the scoping meetings, will receive the same consideration during EIS and OEIS preparation. Written comments must be postmarked no later than September 14, 2010, and should be mailed to: Naval Facilities Engineering Command, Southwest, 2730 McKean Street, Building 291, San Diego, CA 92136–5198, Attention: Mr. Kent Randall—HSTT EIS/OEIS.

Dated: July 9, 2010.

D.J. Werner

Lieutenant Commander, Office of the Judge Advocate General, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2010–17234 Filed 7–14–10; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent To Prepare an Environmental Impact Statement and Overseas Environmental Impact Statement for Navy Atlantic Fleet Training and Testing and To Announce Public Scoping Meetings

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality Regulations (40 Code of Federal Regulations [CFR] Parts 1500–1508), and Executive Order 12114, the Department of the Navy (DON) announces its intent to prepare an Environmental Impact Statement (EIS) and Overseas EIS (OEIS) to evaluate the potential environmental effects associated with military readiness training and research, development, testing, and evaluation (RDT&E) activities (hereinafter referred to as "training and testing" activities) conducted within the Atlantic Fleet Training and Testing (AFTT) study area. The AFTT study area includes the western North Atlantic Ocean along the east coast of North America (including the area where the Undersea Warfare Training Range will be used), the Chesapeake Bay, and the Gulf of Mexico. Also included are select Navy pierside locations and channels. The AFTT study area does not include the Arctic. This EIS and OEIS is being prepared to renew and combine current regulatory permits and authorizations; address current training and testing not covered under existing permits and authorizations; and to obtain those permits and authorizations necessary to support force structure changes and emerging and future training and testing requirements.

The DON will invite the National Marine Fisheries Service to be a cooperating agency in preparation of this EIS and OEIS.

DATES AND ADDRESSES: Five public scoping meetings will be held between 4 p.m. and 8 p.m. on the following dates and at the following locations:

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waters, states are required to establish TMDLs according to a priority ranking.

EPA's Water Quality Planning and Management regulations include requirements related to the implementation of Section 303(d) of the CWA (40 CFR 130.7). The regulations require states to identify water-quality-limited waters still requiring TMDLs every two years. The lists of waters still needing TMDLs must also include priority rankings, identify the pollutants causing the impairment, and must identify the waters targeted for TMDL development during the next two years (40 CFR 130.7).

Consistent with EPA's regulations, Utah submitted to EPA its listing decisions under Section 303(d)(2) in correspondence dated March 31, 2011 and April 21, 2011. On February 10, 2012, EPA partially approved with further review pending for Kanab Creek and tributaries, Utah's 2008 and 2010 listings of waters and associated priority rankings. On April 11, 2012, EPA disapproved Utah's decision to not include Kanab Creek and tributaries, from state line to irrigation diversion at confluence with Reservoir Canyon on the 2008 and 2010 lists. EPA solicits public comment on the addition of these waters to the State's list, as required by 40 CFR 130.7(d)(2).

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

Dated: April 26, 2012.

Martin Hestmark,

Acting Assistant Regional Administrator, Office of Ecosystems Protection and Remediation.

[FR Doc. 2012–11428 Filed 5–10–12; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–9002–9]

Environmental Impacts Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564–7146 or *http://www.epa.gov/compliance/nepa/.*

Weekly receipt of Environmental Impact Statements
Filed 04/30/2012 Through 05/04/2012
Pursuant to 40 CFR 1506.9.

Notice

Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at: *http://www.epa.gov/compliance/nepa/eisdata.html.*

Supplementary Information: EPA is seeking agencies to participate in its e-NEPA electronic EIS submission pilot. Participating agencies can fulfill all requirements for EIS filing, eliminating the need to submit paper copies to EPA Headquarters, by filing documents online and providing feedback on the process. To participate in the pilot, register at: *https://cdx.epa.gov.*

EIS No. 20120136, Final Supplement, APHIS, NY, Bird Hazard Reduction Program, John F. Kennedy International Airport, Updated Information on the Efficacy and Impacts of the Gull Hazard Reduction Program and All Other Bird Hazard Management Activities, Queens County, NY, Review Period Ends: 06/13/2012, Contact: Martin S. Lowney 518–477–4837.

EIS No. 20120137, Draft EIS, USFS, 00, Mountain Pine Beetle Response Project, Implementing Multiple Resource Management Activities, Black Hills National Forest, Custer, Fall River, Lawrence, Meade, and Pennington Counties, SD and Crook and Weston Counties, WY, Comment Period Ends: 06/25/2012, Contact: Katie Van Alstyne 605–343–1567.

EIS No. 20120138, Draft EIS, USACE, FL, Tarmac King Road Limestone Mine, Construction, Issuance of Permit, Levy County, FL, Comment Period Ends: 07/11/2012, Contact: Edward Sarfert 850–439–9533.

EIS No. 20120139, Draft EIS, NPS, GA, Fort Pulaski National Monument General Management Plan and Wilderness Study, Implementation, Chatham County, GA, Comment Period Ends: 07/09/2012, Contact: David Libman 404–507–5701.

EIS No. 20120140, Final EIS, USAF, OH, Wright-Patterson Air Force Base (WPAFB) Project, Reconfigure and Relocate Facilities and Base Perimeter Fence Relocation in Area A, Fairborn, OH, Review Period Ends: 06/11/2012, Contact: Estella Holmes 937–522–3522.

EIS No. 20120141, Final EIS, USFS, CO, Beaver Creek Mountain Improvements Project, Special Use Permit, White River National Forest, Eagle County, CO, Review Period Ends: 06/11/2012, Contact: Don Dressler 970–827–5157.

EIS No. 20120142, Draft EIS, USN, 00, Atlantic Fleet Training and Testing Activities, To Support and Conduct Current, Emerging, and Future Training and Testing Activities along the Eastern Coast of the U.S. and Gulf of Mexico, Comment Period Ends: 06/25/2012, Contact: Jene Nissen 757–836–5221.

EIS No. 20120143, Draft EIS, USN, 00, Hawaii-Southern California Training and Testing Activities, To Support and Conduct Current, Emerging, and Future Training and Testing Activities off Southern California and around the Hawaiian Islands, CA, HI, Comment Period Ends: 06/25/2012, Contact: Alex Stone 619–545–8128.

EIS No. 20120144, Draft EIS, USAF, CA, F–15 Aircraft Conversion, 144th Fighter Wing, California National Guard, To Convert the Unit from the F–16 Fighting Falcon Aircraft and Operations to the F–15 Eagle Aircraft and Operations at Fresno-Yosemite International Airport, Fresno County, CA, Comment Period Ends: 06/25/2012, Contact: Robert Dogan 240–612–8859.

EIS No. 20120145, Draft EIS, BR, CA, Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority, 2014–2038, To Execute Agreements for Water Transfers/or Exchanges, San Joaquin Valley, Fresno, Madera, Merced, and Stanislaus Counties, CA, Comment Period Ends: 07/03/2012, Contact: Bradley Hubbard 916–978–5204.

Dated: May 8, 2012.

Cliff Rader,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 2012–11467 Filed 5–10–12; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

Information Collection Being Reviewed by the Federal Communications Commission

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burden and as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the Federal Communications Commission invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s). Comments are requested concerning: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, and clarity of the information collected; (d) ways to

Alternatives 1 and 2 analyze adjustments to Study Area boundaries and the location, type, and level of training and testing activities necessary to support current and planned DoN training and testing requirements through 2019. The analysis addresses force structure changes, including those resulting from the development, testing, and ultimate introduction of new vessels, aircraft and weapons systems into the fleet.

No significant adverse impacts are identified for any resource area in any geographic location within the Study Area that cannot be mitigated. Additionally, due to the exposure of marine mammals to underwater sound, NMFS has received an application from DoN for a Marine Mammal Protection Act Letter of Authorization and governing regulations to authorize incidental take of marine mammals that may result from the implementation of the activities analyzed in the Draft EIS/OEIS. In accordance with Section 7 of the Endangered Species Act, the DoN is consulting with NMFS and U.S. Fish and Wildlife Service, as appropriate, for potential impacts to federally listed species. In accordance with the Magnuson-Stevens Fishery Conservation and Management Act, the DoN is consulting with NMFS on federally managed species and their essential fish habitat. The DoN will initiate consultation under the National Historic Preservation Act regarding impacts to historic properties, and will comply with other applicable laws and regulations.

The Draft EIS/OEIS was distributed to Federal, State, and local agencies, elected officials, and other interested individuals and organizations. Copies of the Draft EIS/OEIS are available for public review at the following libraries:

1. Anne Arundel County Public Library, Annapolis Area Branch, 1410 West Street, Annapolis, MD 21401.
2. Bay County Public Library, 898 West 11th Street, Panama City, FL 32401.
3. Ben May Main Library, 701 Government Street, Mobile, AL 36602.
4. Boston Public Library, Central Library, 700 Boylston Street, Boston, MA 02116.
5. Camden County Public Library, 1410 Highway 40 E, Kingsland, GA 31548.
6. Carteret County Public Library, 1702 Live Oak Street, Suite 100, Beaufort, NC 28516.
7. Charleston County Public Library, Main Library, 68 Calhoun Street, Charleston, SC 29401.
8. Corpus Christi Public Library, La Retama Library, 805 Comanche, Corpus Christi, TX 78401.
9. East Bank Regional Library, 4747 West Napoleon Avenue, Metairie, LA 70001.
10. Hatteras Library, 57709 Highway 12, Hatteras, NC 27943.
11. Havelock-Craven County Public Library, 301 Cunningham Boulevard, Havelock, NC 28532.
12. Houston Public Library, 500 McKinney Street, Houston, TX 77002.
13. Jacksonville Public Library, Main Library, 303 North Laura Street, Jacksonville, FL 32202.
14. Kill Devil Hills Branch Library, Main Library, 400 Mustian Street, Kill Devil Hills, NC 27948.
15. Meridian-Lauderdale County Public Library, 2517 7th Street, Meridian, MS 39301.
16. New Hanover County Public Library, 201 Chestnut Street, Wilmington, NC 28401.
17. New Orleans Public Library, Main Library, 219 Loyola Avenue, New Orleans, LA 70112.
18. Mary D. Pretlow Anchor Branch Library, 111 West Ocean View Avenue, Norfolk, VA 23503.
19. Onslow County Public Library, 58 Doris Avenue East, Jacksonville, NC 28540.
20. Portland Public Library, 5 Monument Square, Portland, ME 04101.
21. Providence Public Library, 150 Empire Street, Providence, RI 02903.
22. Public Library of New London, 63 Huntington Street, New London, CT 06320.
23. Southmost Branch Library, 4320 Southmost Boulevard, Brownsville, TX 78521.
24. Walton County Coastal Branch Library, 437 Greenway Trail, Santa Rosa Beach, FL 32459.
25. Webb Memorial Library and Civic Center, 812 Evans Street, Morehead City, NC 28557.
26. West Florida Public Library, Main Library, 200 West Gregory Street, Pensacola, FL 32502.
27. West Florida Public Library, Southwest Branch, 12248 Gulf Beach Highway, Pensacola, FL 32507.
28. West Palm Beach Public Library, 411 Clematis Street, West Palm Beach, FL 33401.

Copies of the AFTT Draft EIS/OEIS are available for electronic viewing or download at *http://www.AFTTEIS.com*. A paper copy of the Executive Summary or a single compact disc of the Draft EIS/OEIS will be made available upon written request by contacting: Naval Facilities Engineering Command Atlantic, Attn Code EV22 (AFTT EIS Project Managers), 6506 Hampton Boulevard, Norfolk, VA 23508–1278.

Dated: May 4, 2012.

J.M. Beal,

Lieutenant Commander, Office of the Judge Advocate General, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2012–11410 Filed 5–10–12; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Public Meetings for the Draft Environmental Impact Statement/ Overseas Environmental Impact Statement for Navy Hawaii-Southern California Training and Testing

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to section 102(2)(c) of the National Environmental Policy Act of 1969, and regulations implemented by the Council on Environmental Quality regulations (40 Code of Federal Regulations parts 1500–1508), and Presidential Executive Order 12114, the Department of the Navy (DoN) has prepared and filed with the U.S. Environmental Protection Agency a Draft Environmental Impact Statement (EIS)/Overseas EIS (OEIS). The Draft EIS/OEIS evaluates the potential environmental effects associated with military readiness training and research, development, test and evaluation activities (training and testing) conducted within the Hawaii-Southern California Training and Testing (HSTT) Study Area. The National Marine Fisheries Service (NMFS) is a Cooperating Agency for the EIS/OEIS.

The HSTT Study Area is comprised of established operating and warning areas across the north-central Pacific Ocean, from Southern California west to Hawaii and the International Date Line. The Study Area combines the at-sea portions of the Hawaii Range Complex; the Southern California Range Complex; the Silver Strand Training Complex; transit corridors on the high seas that are not part of the range complexes where training and sonar testing may occur during vessel transit between the Hawaii Range Complex and the Southern California Range Complex; and Navy pierside locations where sonar maintenance and testing activities occurs. The HSTT Study Area includes only the at-sea components of the range complexes and testing ranges. The land-based portions of the range complexes are not a part of the Study Area and will be or already have been addressed under separate DoN environmental planning documentation.

With the filing of the Draft EIS/OEIS, the DoN is initiating a 60-day public comment period, beginning on May 11, 2012 and ending on July 10, 2012. During this period the DoN will conduct five public meetings to receive oral and written comments on the Draft EIS/OEIS. This notice announces the dates and locations of the public meetings and provides supplementary information about the environmental planning effort.

DATES AND ADDRESSES: Public information and comment meetings will be held at each of the locations listed below between 5:00 p.m. and 8:00 p.m. The meetings will provide individuals with information on the Draft EIS/OEIS in an open house format. DoN and NMFS representatives at informational poster stations will be available during the public meetings to clarify information related to the Draft EIS/OEIS.

The public meetings will be held between 5:00 p.m. and 8:00 p.m. on the following dates and at the following locations:

1. June 12, 2012 (Tuesday) at the Wilcox Elementary School Cafeteria, 4319 Hardy Street, Lihue, HI.

2. June 13, 2012 (Wednesday at Maui Waena Intermediate School Cafeteria, 795 Onehee Avenue, Kahului, HI.

3. June 14, 2012 (Thursday) at East Hawaii Cultural Center, 141 Kalakaua Street, Hilo, HI.

4. June 15, 2012 (Friday) at McKinley High School Cafeteria, 1039 South King Street, Honolulu, HI.

5. June 20, 2012 (Wednesday) at Marina Village Conference Center, Starboard Room, 1936 Quivira Way, San Diego, CA.

Federal, State and local agencies and officials, interested groups and individuals are encouraged to provide oral comments in person at any of the public meetings or in writing anytime during the public comment period. Oral testimony from the public will be recorded by a court reporter. In the interest of available time, and to ensure all who wish to give an oral statement to the court reporter have the opportunity to do so, each speaker's comments will be limited to three (3) minutes, which may be extended if meeting attendance permits. Comments may also be submitted via the U.S. Postal Service to Naval Facilities Engineering Command, Southwest, Attention: HSTT EIS/OEIS Project Manager—EV21.CS; 1220 Pacific Highway, Building 1, Floor 3, San Diego, CA 92132–5190 or electronically via the project Web site (*http://www.HSTTEIS.com*). All statements, oral or written, submitted during the public review period will become part of the public record on the Draft EIS/OEIS and will be responded to in the Final EIS/OEIS. Equal weight will be given to oral and written statements. All public comments must be postmarked or received by July 10, 2012 to ensure they become part of the official record.

FOR FURTHER INFORMATION CONTACT: Naval Facilities Engineering Command, Southwest, Attention: HSTT EIS/OEIS Project Manager—EV21.CS; 1220 Pacific Highway, Building 1, Floor 3, San Diego, CA 92132–5190.

SUPPLEMENTARY INFORMATION: A Notice of Intent to prepare this Draft EIS/OEIS was published in the **Federal Register** on July 15, 2010 (75 FR 41162).

The DoN's Proposed Action is to conduct training and testing activities—which may include the use of active Sound Navigation and Ranging (sonar) and explosives—primarily within existing range complexes and testing ranges throughout the in-water areas around the Hawaiian Islands and off the coast of Southern California, Navy pierside locations, and the ocean transit corridor between Hawaii and Southern California. The purpose of the Proposed Action is to conduct training and testing activities to ensure that the DoN accomplishes its mission to maintain, train, and equip combat-ready U.S. naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. This Draft EIS/OEIS will also support the renewal of federal regulatory permits and authorizations for current training and testing activities and to propose future training and testing activities requiring environmental analysis.

The Draft EIS/OEIS evaluates the potential environmental impacts of three alternatives, including the No Action Alternative and two action alternatives. The No Action Alternative continues baseline training and testing activities, as defined by existing DoN environmental planning documents. Alternatives 1 and 2 analyze adjustments to Study Area boundaries and the location, type, and level of training and testing activities necessary to support current and planned DoN training and testing requirements through 2019. The analysis addresses force structure changes, including those resulting from the development, testing, and ultimate introduction of new vessels, aircraft and weapons systems into the fleet.

No significant adverse impacts are identified for any resource area in any geographic location within the Study Area that cannot be mitigated. Additionally, due to the exposure of marine mammals to underwater sound, NMFS has received an application from DoN for a Marine Mammal Protection Act Letter of Authorization and governing regulations to authorize incidental take of marine mammals that may result from the implementation of the activities analyzed in the Draft EIS/OEIS. In accordance with Section 7 of the Endangered Species Act, the DoN is consulting with NMFS and U.S. Fish and Wildlife Service, as appropriate, for potential impacts to federally listed species. In accordance with the Magnuson-Stevens Fishery Conservation and Management Act, the DoN is consulting with NMFS on Federally managed species and their essential fish habitat.

The Draft EIS/OEIS was distributed to Federal, State and local agencies, elected officials, as well as other interested individuals and organizations. Copies of the Draft EIS/OEIS are also available for public review at the following libraries:

1. Lihue Public Library, 4344 Hardy Street, Lihue, HI 96766.

2. Wailuku Public Library, 251 High Street, Wailuku, HI 96793.

3. Hilo Public Library, 300 Waianuenue Avenue, Hilo, HI 96720.

4. Kailua-Kona Public Library, 75–138 Hualalai Road, Kailua-Kona, HI 96740.

5. Hawaii State Library, Hawaii and Pacific Section Document Unit, 478 South King Street, Honolulu, HI 96813.

6. San Diego Central Library, 820 E Street, San Diego, CA 92101.

7. Long Beach Main Library, 101 Pacific Avenue, Long Beach, CA 90822.

In addition, copies of the HSTT Draft EIS/OEIS are available for electronic viewing or download at *http://www.HSTTEIS.com*. A paper copy of the Executive Summary or a single compact disc of the Draft EIS/OEIS will be made available upon written request by contacting: Naval Facilities Engineering Command, Southwest, Attention: HSTT EIS/OEIS Project Manager—EV21.CS; 1220 Pacific Highway, Building 1, Floor 3, San Diego, CA 92132–5190.

Dated: May 7, 2012.

J.M. Beal,

Lieutenant Commander, Office of the Judge Advocate General, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2012–11387 Filed 5–10–12; 8:45 am]

BILLING CODE 3810–FF–P

Current, Emerging, and Future Training and Testing Activities along the Eastern Coast of the U.S. and Gulf of Mexico, Comment Period Ends: 07/10/2012, Contact: Jene Nissen 757–836–5221.

Revision to FR Notice Published 05/11/2012; Extending Comment Period from 06/25/12 to 07/10/2012.

EIS No. 20120143, Draft EIS, USN, 00, Hawaii-Southern California Training and Testing Activities, To Support and Conduct Current, Emerging and Future Training and Testing Activities off Southern California and around the Hawaiian Islands, CA, HI, Comment Period Ends: 07/10/2012, Contact: Alex Stone 619–545–8128.

Revision to FR Notice Published 05/11/2012; Extending Comment Period from 06/25/12 to 07/10/2012.

Dated: May 15, 2012.

Cliff Rader,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 2012–12112 Filed 5–17–12; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2012–0003; FRL–9348–6]

SFIREG Full Committee; Notice of Public Meeting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Association of American Pesticide Control Officials (AAPCO)/ State FIFRA Issues Research and Evaluation Group (SFIREG), Full Committee will hold a 2-day meeting, beginning on June 18, 2012 and ending June 19, 2012. This notice announces the location and times for the meeting and sets forth the tentative agenda topics.

DATES: The meeting will be held on Monday, June 18, 2012 from 8:30 a.m. to 5:00 p.m. and 8:30 a.m. to 12 noon on Tuesday June 19, 2012.

To request accommodation of a disability, please contact the person listed under **FOR FURTHER INFORMATON CONTACT**, preferably at least 10 days prior to the meeting, to give EPA as much time as possible to process your request.

ADDRESSES: The meeting will be held at EPA. One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA, 22202, 1st Floor South Conference Room.

FOR FURTHER INFORMATION CONTACT: Ron Kendall, Field External Affairs Division, Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; telephone number: (703) 305–5561; fax number: (703) 305–1850; email address: *kendall.ron@epa.gov.* or Grier Stayton, SFIREG Executive Secretary, P.O. Box 466, Milford, DE 19963; telephone number (302) 422–8152; fax (302) 422–2435; email address: *stayton.grier@aapco-sfireg@comcast.net.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are interested in pesticide regulation issues affecting States and any discussion between EPA and SFIREG on FIFRA field implementation issues related to human health, environmental exposure to pesticides, and insight into EPA's decision-making process. You are invited and encouraged to attend the meetings and participate as appropriate. Potentially affected entities may include, but are not limited to:

Those persons who are or may be required to conduct testing of chemical substances under the Federal Food, Drug and Cosmetics Act (FFDCA), or the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and those who sell, distribute or use pesticides, as well as any Non Government Organization.

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether this action might apply to certain entities. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT.**

B. How can I get copies of this document and other related information?

EPA has established a docket for this action under docket ID number EPA–HQ–OPP–2012–0003. Publicly available docket materials are available either in the electronic docket at *http://www.regulations.gov,* or, if only available in hard copy, at the Office of Pesticide Programs (OPP) Regulatory Public Docket in Rm. S–4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. The hours of operation of this Docket Facility are from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket Facility telephone number is (703) 305–5805.

II. Tentative Agenda Topics

1. Office of Pesticide Programs update
2. Office of Compliance and Enforcement update
3. Responses to SFIREG Bed Bug and Endangered Species Act Consultation letters
4. Pollinator Protection issues
5. Methomyl fly bait restricted use classification
6. Pyrethroid Label Changes
7. Regional issues/responses to pre-SFIREG questionnaire
8. Report on "State Regulator in Residence" program—issues and opportunities
9. Tribal certification policy implementation—Issues and information exchange
10. Performance Measures Development
11. Imprelis update/discussion on "down stream" effects of pesticides outside control of applicator (e.g. hot compost, treated irrigation water)
12. Interactions of EPA Regions and State Lead Agencies on:
   a. Support for/involvement with
   b. Enforcement/compliance efforts
   c. Certification/training efforts
   d. Environmental programs
   e. Registration issues
13. Grant Negotiation Procedures
14. Distributor Label Enforcement coordination
15. Update on progress of referred cases

III. How can I request to participate in this meeting?

This meeting is open for the public to attend. You may attend the meeting without further notification.

List of Subjects Environmental protection.

Dated: May 5, 2012.

R. McNally,

Director, Field External Affairs Division, Office of Pesticide Programs.

[FR Doc. 2012–11971 Filed 5–17–12; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

[MB Docket No. 12–122; File No. CSR–8529–P; DA 12–739]

Game Show Network, LLC v. Cablevision Systems Corp.

AGENCY: Federal Communications Commission.

Appendix C: Agency Correspondence

TABLE OF CONTENTS

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0715
14 Jul 10

Dear Sir or Madam:

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

This letter is to inform you that the U.S. Navy is preparing an EIS/OEIS for Navy training and testing activities in the HSTT study area. The study area combines the at-sea portions of the Hawaii Range Complex (HRC); the Southern California (SOCAL) Range Complex (including the San Diego Bay); the Silver Strand Training Complex (SSTC); areas where vessels transit between the HRC and the SOCAL Range Complex; and select Navy pierside location (see Enclosure 1). The Navy is requesting your comments on the scope, content and issues to be considered during the development of the HSTT EIS/OEIS.

The Navy's mission is to organize, train, equip and maintain combat-ready naval forces capable of winning wars, deterring aggression and maintaining freedom of the seas. This mission is mandated by federal law (Title 10 U.S. Code (U.S.C.) § 5062), which charges the Chief of Naval Operations (CNO) with the responsibility for ensuring the readiness of the nation's naval forces. The CNO meets that directive, in part, by establishing and executing training programs and ensuring naval forces have access to the ranges, operating areas and airspace needed to develop and maintain skills for the conduct of operations.

The Navy proposes to conduct military readiness training activities and research, development, testing and evaluation (RDT&E) activities (hereinafter referred to as "training and testing") in areas currently used by the Navy in the HSTT study area. To both achieve and maintain Fleet readiness, the Navy proposes to:

- Adjust baseline training and testing activities from current levels to match levels required to support Navy training and testing requirements beginning in 2014.
- Accommodate evolving mission requirements associated with force structure changes, including those resulting from the development, testing and ultimate introduction of new platforms (vessels, aircraft and weapons systems) into the Fleet.

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

The HSTT EIS/OEIS will address Navy activities that occur in the air, under the ocean surface and on the ocean surface for the following range complexes: HRC, SOCAL Range Complex, and SSTC. Land activities occurring at SOCAL installations and within the HRC have been analyzed in other EIS documents and will be incorporated by reference in this EIS/OEIS.

Environmental issues that will be addressed in the EIS/OEIS include, but are not limited to, the following resource areas: oceanography; air quality; airborne soundscape; biological resources, including threatened and endangered species; cultural resources; transportation; regional economy; recreation; and public health and safety. Your input in identifying specific issues and concerns that should be assessed, in these areas and any additional areas, is important to the process.

In compliance with the National Environmental Policy Act (NEPA) of 1969, the Navy is holding open house public scoping meetings to support an early and open process for determining the scope of issues to be addressed and for identifying significant issues related to the proposed action. Scoping meetings will inform the public of the Navy's proposed action and give community members an opportunity to make comments. Input from scoping meetings will be used to help identify potentially significant issues to be analyzed in the Draft EIS/OEIS.

Six public open house scoping meetings will be held in SOCAL and Hawaii. Members of the public can arrive anytime during the scoping meetings. Representatives from the Navy will be available to provide information and answer questions about the proposed action. There will be no formal presentation. The public scoping meeting schedule is as follows:

Wednesday, August 4, 2010
3:30 to 7:30 p.m.
Point Loma/Hervey Branch Library
Community Room
3701 Voltaire St.
San Diego, Calif.

Thursday, August 5, 2010
4:00 to 8:00 p.m.
Lakewood High School
Room 922/924
4400 Briercrest Ave.
Lakewood, Calif.

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Tuesday, August 24, 2010
4:00 to 8:00 p.m.
Kauai Community College
Cafeteria
3-1901 Kaumualii Highway
Lihue, Hawaii

Wednesday, August 25, 2010
4:00 to 8:00 p.m.
Keehi Lagoon - Disabled American Veterans Hall
Weinberg Hall
2685 North Nimitz Highway
Honolulu, Hawaii

Thursday, August 26, 2010
4:00 to 8:00 p.m.
Hilo High School
Cafeteria
556 Waianuenue Ave.
Hilo, Hawaii

Friday, August 27, 2010
4:00 to 8:00 p.m.
Maui Waena Intermediate School
Cafeteria
795 Onehee Ave.
Kahului, Hawaii

Regardless of whether you are able to participate in the public scoping meetings, you may send written comments to the following address:

Naval Facilities Engineering Command, Southwest
ATTN: Mr. Kent Randall - HSTT EIS/OEIS
1220 Pacific Hwy. Bldg. 1, Floor 5
San Diego, CA 92132

You may also submit comments online at www.HSTTEIS.com. All comments must be postmarked or received by September 14, 2010, to be considered in the Draft EIS/OEIS.

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

For more information about the HSTT EIS/OEIS, please visit the project website. If you would like additional information or to receive a project briefing, please contact Kent Randall at (619)532-3331.

Sincerely,

D. A. MCNAIR
Captain, U. S. Navy
Deputy Fleet Civil Engineer

Enclosure: 1. U.S. Navy Hawaii-Southern California Training and Testing EIS/OEIS Study Area

Distribution:

Federal

U.S. Senators (Hawaii, California)
U.S. Representatives (California Districts 35, 36, 37, 44, 46, 48, 49, 50, 52, 54, 55 and Hawaii Districts 1 and 2)
Federal Aviation Administration
- Washington D.C. headquarters
- Western Pacific Region

U.S. Army Corps of Engineers
- Pacific Ocean Division
  - Honolulu District
- South Pacific Division
  - Los Angeles District

U.S. Department of Commerce
- National Oceanic and Atmospheric Administration
  - National Marine Fisheries Service
    - Washington, D.C. Headquarters
    - Southwest Regional Offices
    - Southwest Fisheries Science Center
    - Pacific Islands Regional Office
    - Pacific Islands Fisheries Science Center
    - Office of Habitat Conservation
      - Southwest and Pacific Islands Region
    - Office of Protected Resources
      - Headquarters and Pacific Islands Region
  - Channel Islands National Marine Sanctuary
  - Hawaiian Islands Humpback Whale National Marine Sanctuary
  - Papahanaumokuakea Marine National Monument

U.S. Coast Guard
- District 11
- District 14
- Office of Operating and Environmental Standards

U.S. Department of the Interior

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Bureau of Indian Affairs
Pacific Regional Office
Southern California Agency
Bureau of Land Management
California Coastal National Monument
Bureau of Ocean Energy Management, Regulation and Enforcement
National Offshore Office
Pacific OCS Region
Western Fisheries Research Center
National Park Service
Pacific West Region
Channel Islands National Park
Office of Environmental Policy and Compliance
Oakland Region
U.S. Environmental Protection Agency
Washington, D.C. Headquarters
Region 9
NEPA Compliance Division
U.S. Fish and Wildlife Service
Carlsbad Office
Ventura Office
Pacific Regional Office
Pacific Southwest Regional Office
San Diego Bay National Wildlife Refuge
San Diego National Wildlife Refuge
Hanalei National Wildlife Refuge
Kilauea Point National Wildlife Refuge
Huleia National Wildlife Refuge
James Campbell National Wildlife Refuge
Pearl Harbor National Wildlife Refuge
Kealia Pond National Wildlife Refuge
Marine Mammal Commission
U.S. Geological Survey
Western Region Offices
California Water Science Center
Hawaii Water Science Center

State of California

Office of the Governor
Office of Planning and Research, Military Affairs
State Senators (Districts 27, 33, 35, 38, 39)
State Assemblymembers (Districts 54, 55, 74, 75, 76, 77, 78, 79)
California Coastal Commission
Office of Historic Preservation
Department of Conservation
Department of Environmental Protection
Division of Air Quality
Division of Environmental Health
Division of Information and Administrative Services
Division of Water
Department of Fish and Game

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Region 5, Marine Region
Division of Wildlife Conservation
Marine Life Protection Act Blue Ribbon Task Force
Department of Military & Veterans Affairs
Department of Conservation
Division of Land Resource Protection
Department of Transportation & Public Facilities
Division of Airports
Division of Ports & Harbors
Department of Health Services
Department of Parks and Recreation
Department of Toxic Substance Control, Region 4
State Water Resources Control Board
Los Angeles Regional Water Quality Control Board
San Diego Regional Water Quality Control Board
Santa Ana Regional Water Quality Control Board
Natural Resources Agency
State Lands Commission
Wildlife Conservation Board

State of Hawaii

Office of the Governor
State Senators
State Representatives
Department of Hawaiian Home Lands
Department of Health
Department of Land and Natural Resources
Division of State Parks
Division of Aquatic Resources
Division of Conservation and Resource Enforcement
Historic Preservation Division
Division of Forestry and Wildlife
Office of Conservation and Coastal Lands
Department of Transportation
Airports Division
Harbors Division
Department of Business, Economic Development & Tourism
State Land Use Commission
Hawaii Coastal Zone Management Program
Island Burial Councils
Office of Hawaiian Affairs

Local - California

City of Avalon
City of Coronado
City of Dana Point
City of Huntington Beach
City of Imperial Beach
City of Laguna Beach
City of Long Beach

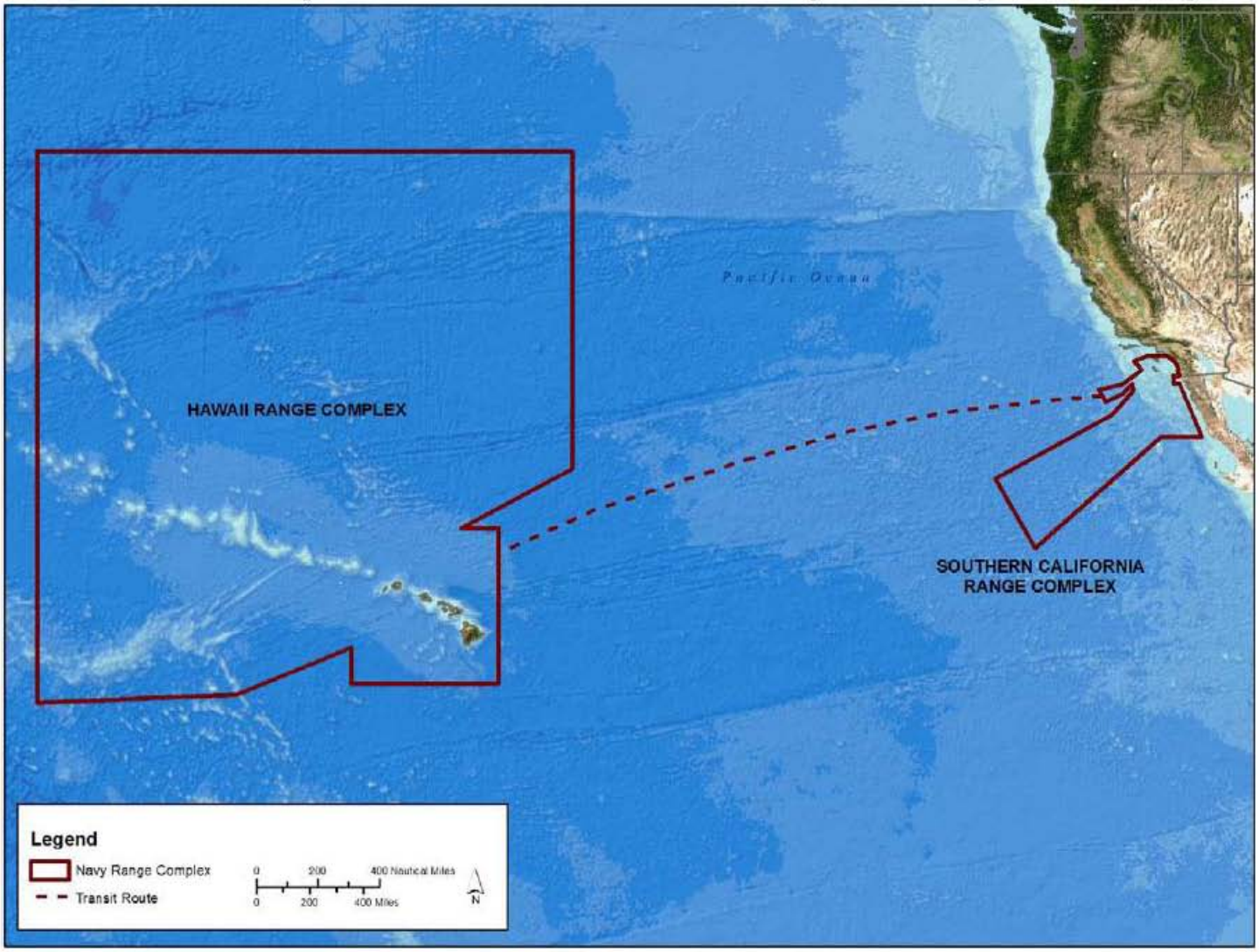
SUBJECT: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY MILITARY READINESS ACTIVITIES IN THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

City of Los Angeles
City of Malibu
City of Newport Beach
City of Oceanside
City of San Diego
County of Los Angeles
County of Orange
County of San Diego
Port of Long Beach
Port of Los Angeles
San Diego Unified Port District

Local - Hawaii

City of Honolulu
County of Honolulu
County of Maui
County of Kauai
Hawaii County

Enclosure 1: U.S. Navy Hawaii-Southern California Training and Testing EIS/OEIS Study Area



8

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

5090
Ser N456D/10U158198
21 July 2010

Mr. Eric C. Schwaab
Assistant Administrator
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910

Dear Mr. Schwaab: Eric

In accordance with the National Environmental Policy Act (NEPA), the Department of the Navy (Navy) is initiating the preparation of an Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) to evaluate the potential environmental effects associated with military readiness training and research, development, testing, and evaluation (RDT&E) activities that include the use of active sonar and explosives around the Hawaiian Islands and off the coast of Southern California (Hawaii-Southern California Training and Testing [HSTT] study area). The HSTT study area specifically combines the at-sea portions of existing Navy range complexes: Hawaii Range Complex (HRC), Southern California Range Complex (SOCAL), and Silver Strand Training Complex (SSTC). The study area also includes those areas where vessels transit between the Hawaii Range Complex and the Southern California Range Complex and select Navy pier-side locations. As a result, the separate analyses contained in the HRC, SOCAL, and SSTC EIS/OEISs will be consolidated into a single EIS/OEIS.

An important aspect of the HSTT EIS/OEIS will be the analysis of the acoustic effects to marine species protected under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). The HSTT EIS/OEIS is also intended to serve as a basis for the renewal of current regulatory permits and authorizations; address current training and testing not covered under the existing permits and authorizations; and obtain those permits and authorizations necessary to support force structure changes and emerging and future training and testing requirements. MMPA Final Rules and ESA Section 7 Programmatic Biological Opinions for HRC and SOCAL will expire in January 2014. The Navy anticipates receiving an Incidental Harassment Authorization (IHA) for the Silver Strand Training Complex in October 2010 and combining that IHA into the permitting and consultation effort for the HSTT study area.

To complete the analysis required by the permitting and consultation processes, the Navy and the National Marine Fisheries Service (NMFS) will need to work together. Therefore, in accordance with the Council on Environmental Quality's (CEQ) NEPA guidelines

(specifically, 40 CFR Part 1501) and CEQ's 2002 guidance on cooperating agencies, Navy requests NMFS serve as a cooperating agency for the development of the HSTT EIS/OEIS.

As the lead agency, the Navy will be responsible for overseeing preparation of the EIS/OEIS that will include, but not be limited to, the following:

- Gathering all necessary background information and preparing the EIS/OEIS and all necessary permit applications associated with acoustic issues.
- Working with NMFS personnel to determine the method of estimating potential effects to protected marine species, including threatened and endangered species.
- Determining the scope of the EIS/OEIS, including the alternatives evaluated.
- Circulating the appropriate NEPA documentation to the general public and any other interested parties.
- Scheduling and supervising meetings held in support of the NEPA process, and compiling any comments received.
- Maintaining an administrative record and responding to any Freedom of Information Act requests relating to the EIS/OEIS.

Navy respectfully requests that NMFS, in its role as a cooperating agency, provide support as follows:

- Providing timely comments after the Agency Information Meeting (which will be held at the onset of the EIS/OEIS process) and on working drafts of the EIS/OEIS documents. The Navy requests that comments on draft EIS/OEIS documents (Version 2) be provided within 30 working days.
- Responding to Navy requests for information, in particular related to review of the acoustic effects analysis and evaluation of the effectiveness of protection and mitigation measures.
- Coordinating, to the maximum extent practicable, any public comment periods required in the MMPA permitting process with the Navy's NEPA public comment periods.
- Participating, as necessary, in meetings hosted by the Navy for discussion of issues related to the EIS/OEIS, including public hearings and meetings.

- Adhering to the overall schedule as set forth by the Navy.
- Providing a formal, written response to this request.

The Navy views this agreement as important to the successful completion of the environmental planning process for the HSTT EIS/OEIS. NMFS assistance will be invaluable in this endeavor.

My point of contact for this action is Ms. Dawn Roderique, (703) 604-1268, email: Dawn.Roderique@navy.mil.

Sincerely,

John Quinn

JOHN P. QUINN
Deputy Director, Energy and
Environmental Readiness
Readiness Division (OPNAV N45)

Copy to:
ASN (EI&E)
DASN (E)
OAGC (EI&E)
COMFLTFORCOM (N73, N77)
COMPACFLT (N01CE, N7)
CNIC (N45)
Commander, Navy Region Hawaii (N40)
Commander, Navy Region Southwest (N40)

Eric – I look forward to further outstanding cooperation and collaboration between NMFS and Navy on this –
John

3

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, Maryland 20910
THE DIRECTOR

Mr. John P. Quinn
Deputy Director, Energy and
Environmental Readiness Division
Department of the Navy
2000 Navy Pentagon
Washington, DC 20350-2000

JUL 11 2013

Dear Mr. Quinn:

Thank you for your letter requesting that NOAA's National Marine Fisheries Service (NMFS) participate as a cooperating agency in the preparation of an Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) to evaluate potential environmental effects of military readiness training and research, development, testing, and evaluation (RDT&E) activities conducted within the Hawaii-Southern California Training and Testing (HSTT) Study Area. We reaffirm our support of the Navy's decision to prepare an EIS/OEIS and agree to be a cooperating agency, due, in part, to our responsibilities under section 101(a)(5)(A) of the Marine Mammal Protection Act (MMPA) and section 7 of the Endangered Species Act.

In response to your letter, NMFS staff will continue to, to the extent possible,

- Provide timely review and comments, within 30 working days, after the Agency Information Meeting and on working drafts of the EIS/OEIS documents;
- Respond to Navy requests for information, in particular those related to the acoustic effects analysis and the evaluation of the effectiveness of protection and mitigation measures, in a timely manner;
- Participate in meetings, as necessary, hosted by the Navy to discuss issues related to the EIS/OEIS, including public hearings on the draft EIS/OEIS; and
- Adhere to the overall schedule as agreed upon by NMFS and the Navy.

If you need any additional information, please contact Ms. Jolie Harrison, NMFS Office of Protected Resources, at (301) 427-8401.

Sincerely,

Samuel D. Rauch, III
Deputy Assistant Administrator
for Regulatory Programs,
performing the functions and duties of the
Assistant Administrator for Fisheries

THE ASSISTANT ADMINISTRATOR
FOR FISHERIES

Printed on Recycled Paper

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0397
April 4, 2012

Ms. Helen M. Golde
Acting Director, Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway
SSMC3, Room 13821
Silver Spring, MD 20910-3282

SUBJECT: REQUEST FOR MARINE MAMMAL PROTECTION ACT (MMPA) INCIDENTAL TAKE AUTHORIZATION AND REGULATIONS FOR U.S. HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) ACTIVITIES

Dear Ms. Golde:

In accordance with MMPA, as amended and 50 C.F.R. Part 216, the U.S. Navy requests 5-year incidental take authorization and regulations for the incidental taking of marine mammals associated with HSTT activities occurring within the Pacific Ocean.

The Proposed Action may incidentally expose marine mammals that reside within the HSTT study area to sound and other environmental stressors associated with training and testing activities. The enclosed request further describes the HSTT activities and study area and provides the specific information required by National Marine Fisheries Service (NMFS) for consideration of an incidental take request.

The U.S. Navy requests the above regulations authorize, and the NMFS issue, two 5-year Letter of Authorizations; one issued to Commander, U.S. Pacific Fleet for training activities and one issued to Commander, Naval Sea Systems Command for testing activities. Addresses for these commands are provided below:

SUBJECT: REQUEST FOR MARINE MAMMAL PROTECTION ACT (MMPA) INCIDENTAL TAKE AUTHORIZATION AND REGULATIONS FOR U.S. HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) ACTIVITIES

Commander, United States Pacific Fleet
Attn: N01CE1
250 Makalapa Drive
Honolulu, HI 96860-3131

Commander, Naval Sea Systems Command
Attn: Code SEA 04R
1333 Isaac Hull Avenue, SE
Washington Navy Yard, Washington DC 20376

We appreciate your continued support in helping the U.S. Navy to meet its environmental responsibilities.

Sincerely,

L. M. FOSTER
By direction

Enclosure: Request for Regulations and Letters of Authorization for the Incidental Taking of Marine Mammals Resulting From U.S. Navy Training and Testing Activities in the HSTT Study Area

Copy to:
Ms. Jolie Harrison, NMFS Office of Protected Resources
Ms. Gina Shultz, NMFS Office of Protected Resources

2

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/1266
24 Sep 2012

Ms. Helen M. Golde
Acting Director, Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1315 East-West Highway, SSMC3, Room 13821
Silver Spring, MD 20910-3282

SUBJECT: REVISED REQUEST FOR MARINE MAMMAL PROTECTION ACT INCIDENTAL TAKE AUTHORIZATION AND REGULATIONS FOR U.S. NAVY HAWAII AND SOUTHERN CALIFORNIA TRAINING AND TESTING ACTIVITIES

On April 4, 2012 the U.S. Navy submitted an application for a five-year incidental take authorization and regulations under the Marine Mammal Protection Act (MMPA) for the incidental taking of marine mammals associated with Hawaii and Southern California and Testing (HSTT) activities occurring within the Pacific Ocean. Since our submittal of the application we have continued to refine our proposed activities and the associated analysis of potential impacts on marine mammals. We have also discussed the initial application with your staff and incorporated additional information based on those discussions. In light of the above refinements and discussions, the U.S. Navy is submitting the enclosed revised application in accordance with the MMPA, as amended, and 50 C.F.R. Part 216, for a five-year incidental take authorization and regulations for HSTT activities.

The primary revisions to the initial application include: 1) corrections to errors, typos, and transcription mistakes; 2) addition of training and testing requirements that were not identified in time to incorporate into the initial application; 3) clarification of how events were modeled; and 4) the addition of post-model quantification to supplement the analysis of acoustic effects to include animal avoidance of sound sources, animal avoidance of areas of activity before use of a sound source or explosive, and implementation of mitigation.

As stated in our April 4, 2012 letter, the U.S. Navy requests the above regulations authorize, and National Marine Fisheries Service (NMFS) issue two five-year Letters of Authorization; one issued to Commander, United States Pacific Fleet for training activities, and one issued to Commander, Naval Sea Systems Command for testing activities.

5090
Ser N01CE1/1266
24 Sep 2012

Addresses for these commands are provided below.

- Commander, U.S. Pacific Fleet
  Attn: Code N01CE1 Fleet Environmental Readiness
  250 Makalapa Drive
  Pearl Harbor, HI 96860-3131

- Commander, Naval Sea Systems Command
  Attn: Code SEA 04R
  1333 Isaac Hull Avenue, SE
  Washington Navy Yard, DC 20376

If your staff has any technical questions regarding this application, the U.S. Pacific Fleet Point of Contact is Mr. Chip Johnson, (619) 767-1567.

Sincerely,

L. M. FOSTER
By direction

Enclosures: 1. Request for Regulations and Letters of Authorization for the Incidental Taking of Marine Mammals Resulting From U.S. NAVY Training and Testing Activities in the HSTT Study Area (September 2012)

Copy to:
Ms. Jolie Harrison, NMFS Office of Protected Resources
Ms. Ms. Gina Shultz, NMFS Office of Protected Resources

2

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/1251
24 Sep 2012

Ms. Helen Golde
Director, Office of Protected Resources
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
SSMC3, Room 13821
1315 East-West Highway
Silver Spring, MD 20910-3282

SUBJECT: REQUEST FOR INITIATION OF ENDANGERED SPECIES ACT SECTION 7 FORMAL CONSULTATION FOR COMMANDER, UNITED STATES PACIFIC FLEET TRAINING AND TESTING ACTIVITIES

Dear Ms. Golde:

In accordance with section 7 of the Endangered Species Act, the U.S. Navy requests initiation of formal consultation on Hawaii-Southern California Training and Testing (HSTT) activities occurring within the Pacific Ocean off the coast of Southern California and in the surrounding waters of the Hawaiian Islands.

The proposed action may affect listed species that reside within the HSTT Study Area by exposing them to sound and other environmental stressors associated with training and testing activities. The enclosed HSTT Draft Environmental Impact Statement (DEIS)/Draft Overseas Environmental Impact Statement (DOEIS) is the Navy's primary document that provides the required information pursuant to 50 C.F.R. §402.12(f). The U.S. Navy is requesting formal consultation on Alternative 2 within the EIS/OEIS. In addition, the enclosed Supplemental Information document serves as a roadmap for identifying the required information within the EIS/OEIS, and provides additional, supporting information not found within the EIS/OEIS.

5090
Ser N01CE1/1251
24 Sept 2012

The Navy is requesting formal consultation on ESA-listed species addressed in this consultation package including the humpback whale, (*Megaptera novaeangliae*), sei whale (*Balaenoptera borealis*), fin whale (*Balaenoptera physalus*), blue whale (*Balaenoptera musculus*), sperm whale (*Physeter macrocephalus*), Hawaiian monk seal (*Monachus schauinslandi*), green turtle (*Chelonia mydas)*, hawksbill turtle *(Eretmochelys imbricata*), olive ridley turtle (*Lepidochelys olivacea*), loggerhead turtle (*Caretta caretta*), and leatherback turtle (*Dermochelys coriacea*), as well as designated critical habitat for Hawaiian monk seal. The Navy is also requesting concurrence on our Not Likely to Adversely Affect determinations for black abalone (*Haliotis cracherodii*), white abalone (*Haliotis sorenseni*), and steelhead trout (*Oncorhynchus mykiss*) as well as designated critical habitat for steelhead trout and black abalone. In addition, the Navy is requesting a conference opinion on the Hawaiian insular stock of false killer whale (*Pseudorca crassidens*).

We appreciate your continued support in helping the U.S. Navy to meet its environmental responsibilities.

Sincerely,

L. M. FOSTER
Director, Environmental Readiness
By direction

Enclosures: 1) CD-ROM of the Draft EIS/OEIS for the Navy's HSTT Activities
2) HSTT ESA Consultation Supplemental Information
3) Excel file with 1dB and 6dB bin modeled exposure data by species
4) Excel file of master activity tables
5) HSTT Letter of Authorization under MMPA

Copy to: Ms. Kris Peterson, NMFS Office of Protected Resources
Mr. Stan Rogers, NMFS Office of Protected Resources

2

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/1494
15 Nov 2012

Loyal Mehrhoff, PhD
Field Supervisor
Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Suite 3-122
Honolulu, Hawaii 96850

SUBJECT: REQUEST FOR INFORMAL CONSULTATION UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (ESA) FOR SPECIES UNDER U.S. FISH AND WILDLIFE SERVICE (USFWS) JURISDICTION WITHIN THE HAWAII PORTION OF THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Dear Dr. Mehrhoff:

In accordance with section 7 of the ESA, the U.S. Navy requests informal consultation on HSTT activities occurring within the Pacific Ocean in the surrounding waters of the Hawaiian Islands.

The Proposed Action may affect listed species that reside within the HSTT Study Area by exposing them to sound and other environmental stressors associated with training and testing activities. The enclosed HSTT Draft Environmental Impact Statement (DEIS)/Overseas Environmental Impact Statement (OEIS) (Enclosure 1) is the Navy's primary document that provides the required information pursuant to 50 C.F.R. §402.12(f). Chapter 5 was revised after the DEIS release so the revised Chapter is provided as Enclosure 3.

The U.S. Navy is requesting informal consultation on Alternative 2 within the EIS/OEIS for species that occur within the Hawaii portion of the HSTT Study Area and are under the jurisdiction of the USFWS. Sea turtles are not included in this consultation as land-based activities are not being covered in the HSTT EIS. Those activities were covered in the Hawaii Range Complex (HRC) EIS and are not changing. Also, the Navy is consulting with National

SUBJECT: REQUEST FOR INFORMAL CONSULTATION UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (ESA) FOR SPECIES UNDER U.S. FISH AND WILDLIFE SERVICE (USFWS) JURISDICTION WITHIN THE HAWAII PORTION OF THE HAWAII-SOTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Marine Fisheries Service under ESA for proposed at-sea training and testing activities that may affect listed species under their jurisdiction. Therefore, ESA-listed seabirds are the only species being covered in this informal consultation. In addition, the enclosed Supplemental Information (Enclosure 3) serves as a roadmap for identifying the required information within the EIS/OEIS.

The Navy requests concurrence that the described actions may affect, but are not likely to adversely affect the Hawaiian petrel (*Pterodroma sandwichensis*), short-tailed albatross (*Phoebastria albatrus*), and Newell's shearwater (*Puffinus auricularis newelli*).

Thank you for your assistance. Please contact Mr. Frans Juola at Naval Facilities Engineering Command, Pacific at email: frans.juola@navy.mil, (808)472-1433 or Ms. Julie Rivers at email julie.rivers@navy.mil, (808)474-6391 regarding this informal consultation request.

Sincerely,

L. M. FOSTER
Director, Fleet Environmental
Readiness Division
By direction

Enclosures: 1) CD-ROM of the DEIS/OEIS for the Navy's HSTT Activities
2) Revised EIS/OEIS Chapter 5 (Standard Operating Procedures, Mitigations)
3) HSTT ESA Consultation Supplemental Information and Monitoring

2

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2013-I-0057

JUN 0 7 2013

Mr. Larry M. Foster
Director
Fleet Environmental Readiness Division
Department of the Navy
United States Pacific Fleet
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

Subject: Informal Consultation on the Hawaii Portion of the Proposed U.S. Navy Hawaii-Southern California Training and Testing Study Area within the Pacific Ocean

Dear Mr. Foster:

This letter is in response to your November 15, 2012, request for informal consultation for the proposed U.S. Navy Hawaii-Southern California Training and Testing (HSTT) activities occurring in waters off of the Hawaiian Islands. We received the letter on November 21, 2012. You determined the proposed action is not likely to adversely affect federally endangered short-tailed albatross (*Phoebastria albatrus*), Hawaiian petrel (*Pterodroma sandwichensis*), and the threatened Newell's shearwater (*Puffinus auricularis newelli*).

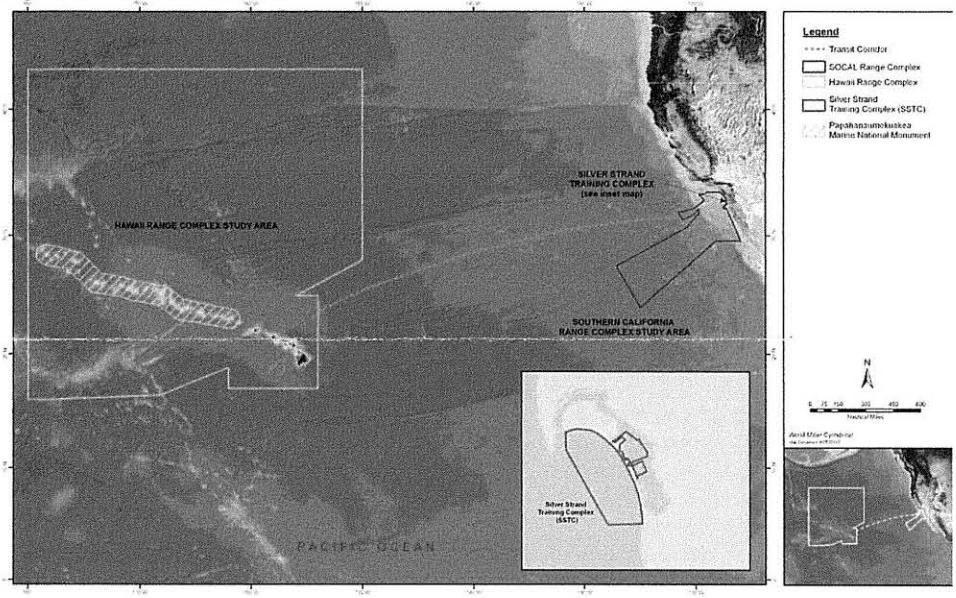
HSTT activities will be implemented as described in Alternative 2 of the HSTT Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS/OEIS). The HSTT action area includes established U.S. Navy (Navy) operating and warning areas across the north-central Pacific Ocean, from Southern California west to Hawaii and the International Date Line. The Study Area includes three existing Navy range complexes: the Hawaii Range Complex, SOCAL Range Complex and Silver Strand Training Complex (SSTC) (Figure 1). The HSTT action area also includes Navy vessel transit corridors and piers outside of the range complexes. HSTT will include: use of active sonar and explosives in the existing range complexes; sonar maintenance and gunnery exercises during ship transits between the range complexes; and sonar testing at Navy piers in Pearl Harbor, Hawaii and San Diego Bay, California. HSTT training and testing activities may occur year round.

HSTT will occur in areas under the jurisdiction of the U.S. Fish and Wildlife Service's Pacific Islands Field Office (PIFWO) and Carlsbad Field Office. This letter addresses only the portions of HSTT under the PIFWO's jurisdiction.

TAKE PRIDE® IN AMERICA

Mr. Larry M. Foster 2

Figure 1. HSTT Action Area



It is likely that few seabirds would be affected by sonar and other underwater active acoustic sources because sources are used intermittently during a training event, training events are dispersed in space and time, most seabirds spend little time submerged, and exposures sufficiently intense (i.e., of a certain duration or within a close proximity) to cause physiological impacts are unlikely. Hawaiian petrels and short-tailed albatrosses do not submerge while foraging; therefore, they would not be exposed to underwater sound from sonar and other active acoustic sources. Newell's shearwater may briefly submerge while foraging, pursuit diving, so there is a remote chance that these species could be exposed to underwater sound sonar and other active acoustic sources.

The short-tailed albatross, Hawaiian petrel, and Newell's shearwater occur in oceanic and off shore waters within the HSTT action area at low frequencies (Navy 2012). HSTT activities could result in adverse effects to these species. Due to the widely dispersed, temporary and intermittent nature of the HSTT activities, and the low frequencies of these species within the HSTT action area, we consider such effects to short-tailed albatross, Hawaiian petrel, and Newell's shearwater possible, but unlikely.

Based on the above and implementation of mitigation measures outlined in detail within DEIS/OEIS, we concur with the Navy's determination that HSTT is not likely to adversely affect endangered short-tailed albatross, Hawaiian petrel, and the threatened Newell's shearwater. Unless the project description changes, or new information reveals that the effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

We appreciate your continued efforts to address the conservation needs of wildlife that may be affected by military training activities. If you have questions regarding this consultation, please contact Aaron Nadig, Fish and Wildlife Biologist, at 808-792-9400.

Sincerely,

Crystal Lemutti
for

Loyal Mehrhoff
Field Supervisor

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/1667
26 Nov 2012

Karen Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, CA 92011

SUBJECT: REQUEST FOR INFORMAL CONSULTATION UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (ESA) FOR SPECIES UNDER U.S. FISH AND WILDLIFE SERVICE (USFWS) JURISDICTION WITHIN THE SOUTHERN CALIFORNIA (SOCAL) PORTION OF THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Dear Mrs. Goebel:

In accordance with section 7 of the ESA, the U.S. Navy requests informal consultation on HSTT activities occurring within the Pacific Ocean off the coast of Southern California.

The Proposed Action may affect listed species that reside within the HSTT Study Area by exposing them to sound and other environmental stressors associated with training and testing activities. The enclosed HSTT Draft Environmental Impact Statement (DEIS)/Overseas Environmental Impact Statement (OEIS) (Enclosure 1) is the Navy's primary document that provides the required information pursuant to 50 C.F.R. §402.12(f). Chapter 5 was revised after the DEIS release so the revised Chapter is provided as Enclosure 2.

The U.S. Navy is requesting informal consultation on Alternative 2 within the EIS/OEIS for species that occur within the SOCAL portion of the HSTT Study Area and are under the jurisdiction of the USFWS. Land-based activities are not part of the HSTT EIS proposed activities. Those activities were addressed in the SOCAL and Silver Strand Training Complex (SSTC)

SUBJECT: REQUEST FOR INFORMAL CONSULTATION UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (ESA) FOR SPECIES UNDER U.S. FISH AND WILDLIFE SERVICE (USFWS) JURISDICTION WITHIN THE SOUTHERN CALIFORNIA (SOCAL) PORTION OF THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

EISs, and associated Biological Opinions and are not proposed to change under the HSTT EIS Proposed Action. Also, the Navy is consulting with National Marine Fisheries Service under ESA for proposed at-sea training and testing activities that may affect listed species under their jurisdiction. Therefore, ESA-listed seabirds are the only species being covered in this informal consultation. In addition, the enclosed Supplemental Information (Enclosure 3) serves as a roadmap for identifying the required information within the EIS/OEIS.

The Navy requests concurrence that the described actions may affect, but are not likely to adversely affect the California least tern (*Sterna antillarum browni*), short-tailed albatross (*Phoebastria albatrus*), and marbled murrelet (*Brachyramphus marmoratus*).

Thank you for your assistance. Please contact Jacqueline Rice (jacqueline.rice@navy.mil, (619) 545-9339) regarding this informal consultation request.

Sincerely,

L. M. FOSTER
Director, Fleet Environmental Readiness
By direction

Enclosures: 1) CD-ROM of the Draft EIS/OEIS for the Navy's HSTT Activities
2) Revised EIS/OEIS Chapter 5 (Standard Operating Procedures, Mitigations and Monitoring)
3) HSTT ESA Consultation Supplemental Information

2

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

In Reply Refer To:
FWS-SDG-13B0130-13I0187

APR 25 2013

Mr. Larry M. Foster
Director, Fleet Environmental Readiness
U.S. Department of the Navy
Commander, United States Pacific Fleet
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

Subject: Informal Section 7 Consultation on the U.S. Navy's Hawaii-Southern California Training and Testing

Dear Mr. Foster:

This is in response to your letter dated November 26, 2012, requesting informal consultation on Hawaii-Southern California Training and Testing (HSTT), and its effects on the federally endangered California least tern (*Sterna antillarum browni*, least tern), short-tailed albatross (*Phoebastria albatrus*), and marbled murrelet (*Brachyramphus marmoratus*), in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). We received your letter on January 4, 2013.

HSTT activities will be implemented as described in Alternative 2 of the HSTT Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS/OEIS). The HSTT action area includes established U.S. Navy (Navy) operating and warning areas across the north-central Pacific Ocean, from southern California to Hawaii and the International Date Line. The action area includes three existing Navy complexes: the Hawaii Range Complex, SOCAL Range Complex, and Silver Strand Training Complex (SSTC) (Figure 1). The HSTT action area also includes Navy vessel transit corridors and piers outside of the complexes. HSTT will include: use of active sonar and explosives in the existing complexes; sonar maintenance and gunnery exercises during ship transits between the complexes; and sonar testing at Navy piers in Pearl Harbor, Hawaii, and San Diego Bay, California. HSTT activities may occur year round.

HSTT will occur in areas under the jurisdiction of the U.S. Fish and Wildlife Service's Pacific Islands Fish and Wildlife Office and Carlsbad Fish and Wildlife Office (CFWO). This letter addresses only the portions of HSTT under the CWFO's jurisdiction.

Based on your letter, HSTT will not include land training and testing activities, nor result in a change to land or in-water training and testing activities identified in the biological opinion on the SSTC Operations (FWS-SDG-8B0503-09F0517), and the San Clemente Island Military

Operations and Fire Management Plan (FWS-LA-09B0027-09F0040). These previous biological opinions addressed potential adverse effects of some HSTT activities to the least tern and western snowy plover (*Charadrius alexandrinus nivosus*), and exempted take associated with the activities. Although the HSTT DEIS/OEIS includes tables that reflect an increase in training frequency for some significant training activities that were previously consulted on (e.g., Battalion sized landings; Table A-1 of HSTT DEI/OEIS, page 2-78), the Navy provided corrected tables that confirm no increase in training will occur on San Clemente Island or the SSTC as part of HSTT (Rice 2013). It is our understanding that these corrected tables will be incorporated into the final HSTT EIS/OEIS.

Figure 1. HSTT Action Area

The Navy will implement the conservation measures identified in biological opinion FWS-SDG-8B0503-09F0517 to avoid and minimize potential adverse effects to the least tern associated with HSTT activities conducted at the SSTC. Therefore, no further consultation on potential impacts to the least tern is necessary for activities already addressed in biological opinion FWS-SDG-8B0503-09F0517.

Additional training and testing activities included in HSTT and not previously addressed in biological opinion FWS-SDG-8B0503-09F0517 include gunnery exercises during ship transits between the range complexes, mine countermeasure exercises, and sonar testing/maintenance. These activities may affect least terns by exposing them to strikes or collisions with vessels,

aircraft, or munitions; physical disturbance; and electromagnetic stressors (Navy 2012). Due to the low density of least terns anticipated within ship transit and at-sea training areas, the mobility of least terns that will allow them to depart from areas of disturbance, and the foraging strategy of least terns that results in little time spent under water, we expect potential effects to least tern to be discountable.

The marbled murrelet and short-tailed albatross occur in oceanic and/or near shore waters off the coast of California, and have been recorded within the HSTT action area at low frequencies (Navy 2012). HSTT activities could result in adverse effects to these species. Due to the widely dispersed, temporary and intermittent nature of the HSTT activities, and the low frequencies of these species within the HSTT action area, we expect potential effects to marbled murrelet and short-tailed albatross to also be discountable.

Based on the above, we concur with the Navy's determination that HSTT is not likely to adversely affect the least tern, marbled murrelet, and short-tailed albatross. Therefore, the interagency consultation requirements of section 7 of the Act have been satisfied. Should project plans change or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered and further section 7 consultation may be required.

We appreciate your continued efforts to address the conservation needs of wildlife that may be affected by military training activities. If you have any questions or concerns with regard to this consultation, please contact Sandy Vissman at 760-431-9440.

Sincerely,

for

Karen A. Goebel
Assistant Field Supervisor

cc:
Aaron Nadig, Honolulu Fish and Wildlife Office

l arry M. Fos (I 'S-SDG-13B0130-13I0187) 4

REFERENCES

Rice, Jacqueline. 2013. Electronic mail message to Sandy Vissman (Service) (February 11, 2013, regarding Tables A1-A4 from the Hawaii-Southern California Training and Testing Draft Environmer Impact Statement/Ov nmental Impact Statement.

U.S. D ı : the Navy (Navy). 2012. Hav ı
Testing Draft Environmental Impact St erseas Environmental Impact Statement.

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0039
January 13, 2013

Mr. Jesse K. Souki
Director
Hawaii Department of Business, Economic Development & Tourism,
Office of Planning
P.O. Box 2359
Honolulu, HI 96804

Dear Mr. Souki:

In accordance with 15 CFR §930, the U.S. Navy, Commander, U.S. Pacific Fleet is submitting the enclosed Consistency Determination (CD) for operations within the Hawaii-Southern California Training and Testing (HSTT) Study Area, which includes the Hawaii Range Complex (HRC). The CD addresses ongoing and future military training and testing within the HRC. The CD is being submitted for consideration by the Office of Planning. A separate CD was prepared and submitted to the California Coastal Commission for their consideration under the CZM Program for operations within the Southern California portion of the Study Area.

In addition to the CZMA Federal Consistency requirements addressed by the submission of the enclosed CD, the Navy is addressing compliance with other environmental laws as follows:

- National Environmental Policy Act and Executive Order 12114. Navy released a Draft Environmental Impact Statement for the HSTT in May, 2012.
- Marine Mammal Protection Act. Navy is seeking an Incidental Harassment Authorization request from the National Marine Fisheries Service (NMFS).
- Endangered Species Act (ESA). Navy is consulting with NMFS and U.S. Fish and Wildlife Service under Section 7 of the ESA.

Subj: HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING CONSISTENCY DETERMINATION

If you have any questions please contact Mr. John Van Name, U.S. Pacific Fleet, (808) 471-1714, John.Vanname@navy.mil and Ms. Rebecca Hommon, Commander Navy Region Hawaii, at (808) 473-4731, rebecca.hommon@navy.mil.

Sincerely,

L. M. Foster
By direction

Encl (1): Hawaii-Southern California Training and Testing Consistency Determination

Copy to: Chief of Naval Operations (N454) (w/o enclosure)
Commander, Navy Region Hawaii (N40) (w/o enclosure)
Mark Delaplaine, California Coastal Commission (w/enclosures)

2

OFFICE OF PLANNING
STATE OF HAWAII

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

NEIL ABERCROMBIE
GOVERNOR

JESSE K. SOUKI
DIRECTOR
OFFICE OF PLANNING

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://hawaii.gov/dbedt/op/

Ref. No. P-13924

March 20, 2013

Mr. Larry M. Foster, Director
Environmental Readiness
Department of the Navy
Commander
United States Pacific Fleet
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

Dear Mr. Foster:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Review for U.S. Navy Hawaii-Southern California Training and Testing (HSTT) Activities

The Office of Planning, CZM Program, State of Hawaii, has completed its review of the Navy's CZM Act federal consistency determination dated January 13, 2013 (received January 18, 2013), for operations and activities within the HSTT area. The Office of Planning conditionally concurs with the Navy's determination that the conduct of U.S. Navy HSTT activities is consistent to the maximum extent practicable with the enforceable policies of the Hawaii CZM Program.[1] The following condition shall apply to all HSTT operations and activities:

> Pursuant to Hawaii CZM Program enforceable policies Hawaii Revised Statutes (HRS) Chapter 195D, and Hawaii Administrative Rules (HAR) Chapter 13-124, HSTT operations or activities within the State of Hawaii CZM management area shall not harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect endangered or threatened species of aquatic life or wildlife, or cut, collect, uproot, destroy, injure, or possess endangered or threatened species of aquatic life or land plants, or attempt to engage in any such conduct. Endangered or threatened species referred to in this condition are those listed in HAR Chapter 13-124. This condition shall not apply to marine mammals.[2]

[1] Pursuant to 15 CFR 930.32(a)(1), "[t]he term 'consistent to the maximum extent practicable' means fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency."

[2] *See* Letter from Jane C. Luxtion, NOAA General Counsel, to Frank R. Jimenez, General Counsel of the Navy, June 20, 2008.

The subject condition is based on two federally-approved enforceable policies of the Hawaii CZM Program: (1) HRS Chapter 195D, *Conservation of Aquatic Life, Wildlife, and Land Plants*, and (2) HAR Chapter 13-124, *Indigenous Wildlife, Endangered and Threatened Wildlife, and Introduced Wild Birds*. HRS §195D-4(e)(2) and HAR §13-124-3(b), prohibit the "take" of any threatened or endangered species within the State of Hawaii. Pursuant to HRS §195D-2, "take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect endangered or threatened species of aquatic life or wildlife, or to cut, collect, uproot, destroy, injure, or possess endangered or threatened species of aquatic life or land plants, or to attempt to engage in any such conduct." The State of Hawaii listing of threatened and endangered species is contained in HAR Chapter 13-124.

According to the Navy's "Coastal Zone Management Act Consistency Determination for Hawaii," dated January 2013 ("Consistency Determination"), impacts to threatened sea turtles are predicted to result from explosions during both training activities and testing activities. Table 3-4, page 35, shows that HSTT activities will cause 21 occurrences of permanent threshold shift (i.e., permanent hearing damage), 13 occurrences of lung injury, and 4 mortalities annually. Table 3-5, page 35, shows that HSTT activities will cause 5 permanent threshold shifts annually. Consequently, HSTT training and testing activities will "take" threatened sea turtles, contravening enforceable policies of the Hawaii CZM Program.

In addition, HSTT activities involving explosive detonations will likely "take" endangered or threatened seabirds. Page 44 of the Consistency Determination predicts that

> [w]hile the impacts of explosive detonations on seabirds under the Proposed Action cannot be quantified due to limited data on seabird density, lethal injury to some seabirds could occur. Lethal injuries would likely be associated with detonations of bombs with larger net explosive weights, although any event employing static targets may attract seabirds to the detonation site.

According to page 43 of the Consistency Determination, "[a] seabird close to an explosive detonation could be killed or injured." Based on this information, it is reasonably foreseeable that HSTT explosive detonations will cause the "take" of endangered or threatened seabirds, contravening enforceable policies of the Hawaii CZM Program.

If the requirements for conditional concurrences specified in 15 CFR §§930.4(a)(1) through (3) are not met, then all parties shall treat this conditional concurrence letter as an objection pursuant to 15 CFR Part 930, Subpart C. Furthermore, you are hereby notified that, pursuant to 15 CFR §930.63(e), you have an opportunity to appeal an objection resulting from not meeting the requirements of 15 CFR §§930.4(a)(1) through (3) to the Secretary of Commerce within 30 days after receiving this conditional concurrence letter.

Mr. Larry M. Foster
Page 3
March 20, 2013

CZM consistency concurrence does not represent an endorsement or favorable consideration of any of the Navy's HSTT operations and activities, nor does it convey approval with any regulations administered by any state or county agency. If you have any questions, please contact me at (808) 587-2846.

Sincerely,

Jesse K. Souki
Director

c: Mr. William Aila, Department of Land and Natural Resources, State of Hawaii

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0513
April 25, 2013

Mr. Jesse K. Souki
Director
Hawaii Department of Business, Economic
Development & Tourism, Office of Planning
P.O. Box 2359
Honolulu, HI 96804

Dear Mr. Souki:

The Navy is in receipt of the State of Hawaii's Office of Planning (OP) letter (dated 18 April 2013) regarding the Hawaii-Southern California Training and Testing Consistency Determination, and the OP's request for clarification regarding our intentions.

The OP specifically asked if the Navy was suggesting that it would engage in consultation with the endangered species recovery committee and apply for a temporary license as part of a habitat conservation plan with the State Board of Land and Natural Resources.

The Navy wishes to make clear that it does not intend to engage in consultation with State offices. Rather, the Navy has initiated consultation with the National Marine Fisheries Service and the Fish and Wildlife Service to ensure that the population and future of endangered species are not put into jeopardy. Additionally, the Navy will minimize and mitigate to the maximum extent practicable the impacts to species of concern in order to ensure that the potential taking of the species are not "likely" to occur.

The Endangered Species Act, and the Navy's consultation under Section 7 of the act serves as the functional equivalent of the State programs and will ensure that Navy activities remain consistent with the enforceable policies of the Hawaii CZM Program.

5090
N01CE1/xxxx
April 23, 2013

The Navy thanks the Office of Planning for allowing us this opportunity to provide clarification and we look forward to continuing our professional relationship with you and your staff.

Sincerely,

L. M. FOSTER
By direction

Copy to: Chief of Naval Operations (N454)
Commander, Navy Region Hawaii (N40)

2

OFFICE OF PLANNING
STATE OF HAWAII

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

NEIL ABERCROMBIE
GOVERNOR

JESSE K. SOUKI
DIRECTOR
OFFICE OF PLANNING

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http:/planning.hawaii.gov/

Ref. No. P-13956

April 18, 2013

Mr. John Coronado
Department of the Navy
Commander
United States Pacific Fleet
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

Dear Mr. Coronado:

Subject: Hawaii-Southern California Training and Testing (HSTT) Consistency Determination

The Office of Planning (OP) has reviewed the Department of the Navy's letter, dated April 12, 2013, regarding its response to OP's Coastal Zone Management Act conditional concurrence regarding the subject activities.

OP seeks to better understand the Navy's position on this matter. According to the Navy's letter, "the proposed conditions [in OP's conditional concurrence letter dated March 20, 2013] are not necessary for the Navy's training and testing activities to be fully consistent with HRS 195-4(e) and (g) because any take would be incidental to, and not the purpose of, an otherwise lawful activity." Is the Navy suggesting that it will engage in consultation with the endangered species recovery committee and apply for a temporary license as a part of a habitat conservation plan with the State Board of Land and Natural Resources (BLNR)?

According to HRS §195-4(e), it is unlawful to take any threatened or endangered species of aquatic life. With regard to subsection (g), which the Navy cites in its letter, an exception to this general rule against taking may be allowed, but only as follows:

> **After consultation with the endangered species recovery committee, the [BLNR] may issue a temporary license as a part of a habitat conservation plan** to allow a take otherwise prohibited by subsection (e) if the take is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity[.]
>
> See HRS §195-4(g) (emphasis added).

Mr. John Coronado
Page 2
April 18, 2013

Thank you for the Navy's willingness to address any remaining concerns using the remaining portion of the 90-day notice period. If you have any questions, please contact me at (808) 587-2846.

Sincerely,

Jesse K. Souki
Director

c: Mr. William Aila, Department of Land and Natural Resources, State of Hawaii

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0038
January 13, 2013

Mr. Charles Lester
Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, California 94105-2219

Dear Mr. Lester:

In accordance with 15 CFR §930, the U.S. Navy, Commander, U.S. Pacific Fleet is submitting the enclosed Consistency Determination (CD) for operations within the Hawaii-Southern California Training and Testing (HSTT) Study Area, which includes the Southern California (SOCAL) Range Complex and the Silver Strand Training Complex (SSTC). The CD addresses ongoing and future military training and testing within the SOCAL Range Complex and SSTC. The CD is being submitted for consideration by the Coastal Commission at the March 6-8, 2013 hearing in San Diego. A separate CD was prepared and submitted to the Hawaii Department of Business, Economic Development & Tourism, Office of Planning for their consideration under the CZM Program for operations within the Hawaii Range Complex portion of the Study Area.

In addition to the CZMA Federal Consistency requirements addressed by the submission of the enclosed CD, the Navy is addressing compliance with other environmental laws as follows:

- National Environmental Policy Act and Executive Order 12114. Navy released a Draft Environmental Impact Statement for the HSTT in May, 2012.
- Marine Mammal Protection Act. Navy is seeking an Incidental Harassment Authorization request from the National Marine Fisheries Service (NMFS).
- Endangered Species Act (ESA). Navy is consulting with NMFS and U.S. Fish and Wildlife Service under Section 7 of the ESA.

Subj: HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING CONSISTENCY DETERMINATION

If you have any questions please contact Mr. Alex Stone, U.S. Pacific Fleet, (619) 545-8128, Alexander.Stone@navy.mil and Ms. Suzanne Smith, Commander Navy Region Southwest, at (619) 532-2284, Suzanne.M.Smith@navy.mil.

Sincerely,

L. M. FOSTER
By direction

Encl: 1. Hawaii-Southern California Training and Testing Consistency Determination

Copy to: Chief of Naval Operations (N454) (w/o enclosure)
Commander, Navy Region Southwest (N40) (w/o enclosure)
John Nakagawa, Hawaii Department of Business, Economic Development & Tourism, Office of Planning (w/enclosures)

2

STATE OF CALIFORNIA—NATURAL RESOURCES AGENCY EDMUND G. BROWN, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200

March 14, 2013

L.M. Foster
Department of the Navy
Commander
United States Pacific Fleet
250 Makalapa Drive
Pearl Harbor, HI 96860-3131

Attn: Alexander Stone

Re: **CD-008-13,** Department of the Navy, Consistency Determination, Southern California portion of the Hawaii-Southern California Training and Testing (HSTT) Program

Dear L.M. Foster:

On March 8, 2013, by a unanimous vote, the California Coastal Commission objected to the above-referenced consistency determination submitted by the Navy for the California portion of its Hawaii-Southern California Training and Testing Program (Program). The Commission's objection was based on lack of sufficient information to determine the Program's consistency to the maximum extent practicable with the marine resource protection policy (Section 30230) and the commercial fishing policies (Sections 30230, 30234, and 30234.5) of the California Coastal Act, all of which are enforceable policies under the California Coastal Management Program (CCMP).

In its deliberations the Commission determined that the consistency determination lacked sufficient information to enable it to determine consistency with the marine resource policy (Section 30230) for the following reasons:

1) The Navy's analysis relied on an incomplete analysis of the requirements of Section 30230, in that it only looked at one of the three tests (population-level effects), ignoring requirements of Section 30230 for the maintenance, enhancement, and, where feasible, restoration, of the overall marine environment, as well as for providing special protection for areas and species of special biological or economic significance.

2) The Navy arbitrarily limited its analysis to only 10 of the 34 marine mammals present in the southern California study area, when the preponderance of the evidence is that 32 of the 34 species are present in the coastal zone.

3) Even the Navy's population level effects analysis was questionable, as it was not supported by substantial evidence. Moreover, it did not include the type of analysis typically supplied in current-day marine mammal population analyses to estimate whether a proposed activity could result in marine mammal stocks falling below their optimal sustainable population levels, which was included in the analysis the Commission relied on in its recent review of the Pacific Gas and Electric Company's high energy seismic survey, and which compared "Level A takes" (under the Marine Mammal Protection Act) against residual "Potential Biological Removal" rates, and "Level B takes" for listed species against minimum population estimates.

4) The Navy provided no explanation as to why significant intensification of use of mid-frequency sonar was needed for military training and testing (e.g., an increase in "MF-1" sonar use (the loudest of the sonars) from 4,454 to 11,534 hours per year).

5) The Navy failed to analyze and consider alternatives such as implementing "time-area" closures, as well as other mitigation measures previously adopted by the Commission in reviewing past Navy consistency determinations for Southern California Training and Testing (CD-086-06 and CD-049-08), measures which the Commission staff requested the Navy to analyze in its July 10, 2012, comments on the HSTT DEIS.

The Commission determined that, without the above information, it was unable to determine whether feasible less damaging alternatives are available that would lessen adverse effects on marine resources, and whether the Program would be carried out: (a) in a manner that maintains, enhances, and, where feasible, restores marine resources; and (b) in a manner that provides special protection to areas of special biological or economic significance.

The Commission also:

1) noted that the Navy's refusal to consider avoiding state- and federally-designated Marine Protected Areas (MPAs) would undermine significant state and federal efforts establishing Marine Protected Areas, by potentially compromising the collection of accurate MPA baseline studies;

2) determined that the consistency determination lacked sufficient information to enable the Commission to determine consistency with the commercial fishing policies (Sections 30230, 30234, and 30234.5) of the Coastal Act, in the Navy's refusal to consider implementing its own 2009 commercial fishing survey recommendations to improve communications with the commercial fishing industry;

3) noted that the Navy had not raised any "practicability" issues in its consistency determination or its testimony before the Commission; and

4) noted and included in the record the attached letter from former NOAA Administrator Jane Lubchenco (sent to Council on Environmental Quality Chair Nancy Sutley) urging consideration of "time-area closures" and "new approaches" by the Navy.

Finally, the Commission urged the Navy to provide the above-requested information and bring back a modified consistency determination for the Program, with a more comprehensive analysis and consideration of alternatives, at a future Commission meeting.

We anticipate the Commission's formal findings in support of its action to be adopted at the April 10-12, 2013, Commission meeting in Santa Barbara.

The federal consistency regulations provide:

§ 930.43 State agency objection.

(b) If the State agency's objection is based upon a finding that the Federal agency has failed to supply sufficient information, the State agency's response must describe the nature of the information requested and the necessity of having such information to determine the consistency of the Federal agency activity with the enforceable policies of the management program.

(c) State agencies shall send to the Director a copy of objections to Federal agency consistency determinations.

(d) In the event of an objection, Federal and State agencies should use the remaining portion of the 90-day notice period (see § 930.36(b)) to attempt to resolve their differences. If resolution has not been reached at the end of the 90-day period, Federal agencies should consider using the dispute resolution mechanisms of this part and postponing final federal action until the problems have been resolved. At the end of the 90-day period the Federal agency shall not proceed with the activity over a State agency's objection unless:

(1) the Federal agency has concluded that under the "consistent to the maximum extent practicable" standard described in section 930.32 consistency with the enforceable policies of the management program is prohibited by existing law applicable to the Federal agency and the Federal agency has clearly described, in writing, to the State agency the legal impediments to full consistency (See §§ 930.32(a) and 930.39(a)), or

(2) the Federal agency has concluded that its proposed action is fully consistent with the enforceable policies of the management program, though the State agency objects.

(e) If a Federal agency decides to proceed with a Federal agency activity that is objected to by a State agency, or to follow an alternative suggested by the State agency, the Federal agency shall notify the State agency of its decision to proceed before the project commences.

If you have any questions, please feel free to call me at (415) 904-5289.

Sincerely,

MARK DELAPLAINE
Manager, Energy, Ocean Resources,
and Federal Consistency Division

Attachment - NOAA Administrator Letter

cc: Office of Ocean and Coastal Resource Management
(Margaret Davidson, Acting Director, David Kaiser, Kerry Kehoe)
NOAA Fisheries (Michelle Magliocca)
Hawaii Coastal Management Program (John Nakagawa)
Acting Under Secretary of Commerce for Oceans and Atmosphere and Acting NOAA Administrator (Dr. Kathryn Sullivan)

UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

JAN 19 2010

Ms. Nancy Sutley
Chair, Council on Environmental Quality
730 Jackson Place, NW
Washington, DC 20503

Dear Nancy,

I write to report to you on the National Oceanic and Atmospheric Administration's (NOAA) review of mitigation measures in rules authorizing take of marine mammals incidental to Navy training exercises, and to inform you of the plan with respect to future work with the Navy on possible additional mitigation measures.

As you recall, on January 20, 2009, as the Obama Administration was taking office, NOAA's National Marine Fisheries Service (NMFS) was in the process of publishing a regulation that would establish a framework to authorize the take of marine mammals incidental to the Navy training exercises involving use of mid-frequency active sonar on its ranges along the Atlantic Coast and in the Gulf of Mexico. Earlier in January, NMFS had published similar rules related to the take of marine mammals incidental to Navy training on Navy training ranges in Hawaii and Southern California. This issue has a history of being controversial, and you requested that NOAA conduct a comprehensive review of all mitigation measures applicable to the use of sonar.

NMFS intended the comprehensive review to give the new Administration an opportunity to understand the process used to develop the rules, and also to evaluate the adequacy of the mitigation measures required by the rule. Each rule took months to develop jointly by the Navy and NOAA scientists, with input from the public during a comment process on the proposed rules. For each rule, an Environmental Impact Statement (EIS) was prepared by the Navy and adopted by NOAA regarding Navy training exercises. In addition to the EISs, for each rule, NMFS prepared an Environmental Assessment in which it specifically considered a suite of mitigation measures, many of which had been recommended by members of the public during the public comment process. In those assessments, NMFS evaluated the potential effectiveness and benefit of each possible mitigation measure. Also, as required by the Marine Mammal Protection Act, NMFS reviewed the practicability of each of the mitigation measures in light of the impact on personnel safety, the practicality of implementation, and the impacts on the Navy's ability to achieve its training goals.

In the Environmental Assessments, NMFS also identified the relevant uncertainties regarding the impacts of the proposed training on marine mammals. Two are worth highlighting. One involves lack of knowledge about the mechanisms whereby some species of marine mammals, particularly beaked whales, are adversely affected by mid-frequency active sonar. The other concerns the difficulties of limiting the impact of active sonar where the mitigation efforts depend on visual sighting of whales. The ongoing mitigation efforts, in our view, must do more

THE ADMINISTRATOR

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to address both of these uncertainties. NMFS included adaptive management provisions in the rules as a mechanism for improving the effectiveness of mitigation, as appropriate. NMFS also required the Navy to provide after-action reports following each exercise, which NMFS will monitor and use to modify mitigation measures, as appropriate. Thus, there are some mechanisms already in place to improve mitigation measures in the long run as new information becomes available.

In the short run, as a result of our findings in this review, NOAA will undertake three specific activities to address the issue of whether there are areas of biological significance impacted by these permitted activities and others undertaken under permits from NMFS (such as oil and gas exploration). First, NMFS, in concert with other civilian agencies (e.g., Minerals Management Service), would like to reinitiate comprehensive aerial cetacean and sea turtle surveys (i.e., multipurpose surveys). I will encourage the Navy to be part of the planning process for these new surveys, and to support their implementation. These surveys will provide not only fine-scale density estimates of whales in particularly sensitive or otherwise important areas (e.g., the ranges), but also provide improved population estimates supporting listing decisions and activities of take reduction teams.

Second, NMFS will conduct a workshop to develop a plan for estimating a comprehensive sound budget for the oceans. We will invite the Navy and other agencies to take part. There is currently a great deal of concern that a variety of human sources of marine sound (e.g., vessel traffic, seismic activity, sonar, and construction activities) are acting in a cumulative way to degrade the environment in which sound-sensitive animals communicate. There are no comprehensive baselines with which to measure the cumulative sound impacts such as increased military vessel traffic and emitted sound, e.g., in the ranges.

Third, NMFS will organize another workshop this year to learn more about marine mammal "hot spots." The Navy and NMFS have made substantial investments in models of existing whale distribution and environmental data to predict abundance and distribution of whales and other mammals in specific locations. As part of this focus, the workshop will evaluate these models, developed primarily for the Northwest Atlantic and the California Current and eastern tropical Pacific, and assess their general applicability. Such models, if verified, have great potential to assist in the design of appropriate mitigation measures that are effective and efficient. Protecting important marine mammal habitat is generally recognized to be the most effective mitigation measure currently available.

In addition, there are ongoing activities that NMFS will be conducting with the Navy because they are required by the permits that have been issued. For example, NMFS has required that the Navy convene a workshop to review and modify, as appropriate, the monitoring measures included in the regulations. This workshop is scheduled for 2011 to give agencies time to gain experience with the rules, to collect information for analysis at the workshop, and to identify any needed changes to improve the monitoring program. NMFS and the Navy have agreed to conduct a pre-workshop in 2010 to allow the public an opportunity to provide input and prepare for the 2011 workshop.

All of the planned workshops should lead to substantial new information related to improved mitigation strategies for military activities that would be implemented through the adaptive management provisions of the permits. Based on the information developed in these workshops, I will encourage NMFS and the Navy and other permittees to address the uncertainties identified above and to evaluate additional methods to reduce further any adverse effects on marine mammals resulting from the Navy's training exercises or other activities that may impact marine mammals or other protected resources.

In addition, NMFS included in various final rules, a requirement that the Navy develop an integrated comprehensive monitoring program, which it recently completed and will go into effect immediately. Any changes to the monitoring program will be made during workshops with NMFS and Navy. NMFS will also continue to work with the Navy to develop and implement new tools to characterize and predict areas that are important to marine mammals in the context of developing associated measures, as appropriate, to reduce impacts to marine mammals in these important areas while allowing the Navy to meet its training goals. In several rules, NMFS required the Navy to enter into a Memorandum of Agreement requiring the Navy to assist NMFS with investigations of strandings of marine mammals. NMFS is working with the Navy to complete this Agreement as soon as possible. NMFS will recommend that the Navy further focus on, develop, and implement technologies that enhance marine mammal detection capabilities (such as passive acoustic detection on instrumented ranges) to allow for both a better understanding of marine mammal activities in the presence of military training as well as, potentially, more effective implementation of mitigation measures.

Moreover, consistent with our legal and scientific mandates, I have directed NMFS to ensure thorough reviews of the Navy's after-action reports are conducted to identify opportunities for strengthening mitigation measures; to process and integrate new information from population assessments, interagency biological response studies, and other sources into its decision making framework; and to take advantage of the adaptive mechanisms in the regulations and annual authorizations to optimize the mitigation measures that are in place for protection of marine mammal species or stocks.

Finally, as part of a settlement agreement in litigation regarding the effects of sonar training on marine mammals, the Navy and the Natural Resources Defense Council (NRDC) have begun to meet and confer to resolve outstanding differences concerning marine mammal mitigation measures. NOAA participated in the first discussion, and is committed to playing an active role in future meetings. I have met with both the Navy and NRDC over the past several months, and I have developed an understanding of the issues and of their respective positions. I believe NOAA's participation will enhance these discussions, and can help to resolve the differing views among the parties. My expectation is that the parties will identify areas of scientific disagreement and uncertainty, and will engage in a healthy debate concerning how to ensure the Navy's training activities minimize, to the least practicable impact, adverse effects on marine mammal species or stocks. I also expect the Navy to be open to new ideas and approaches to mitigation that are supported by the best available science.

At this point, NOAA's review has concluded, but our work on these issues will continue. In addition to the actions outlined above, NMFS will continue to work with the Navy, and in the event specific problems are identified, NMFS will aggressively seek appropriate solutions.

Sincerely,

Jane Lubchenco, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0390
March 26, 2013

Mr. Mark Delaplaine
Manager, Energy, Ocean Resources, and Federal Consistency Division
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, California 94105-2219

Dear Mr. Delaplaine:

SUBJECT: HAWAII-SOCAL TESTING AND TRAINING (HSTT) CONSISTENCY DETERMINATION

This letter provides the Navy's response to your letter of March 14, 2013, notifying the Navy of the decision by the California Coastal Commission on March 8, 2013 regarding the Navy's HSTT activities Consistency Determination (CD), CD-008-13.

The decision made by the Commission was to object to the Navy's CD based on a lack of sufficient information. The letter contains five areas where the Commission believes that the CD is lacking in sufficient information. It also addresses other issues noted by the Commission and requests the Navy to return with an updated CD.

The Navy believes that CD-008-13 provides sufficient information to support the Commission's determination as detailed below. The Navy's CD was prepared in accordance with, and meets all the requirements of 15 C.F.R. §930.39. In addition, throughout the HSTT project, the Navy has coordinated with the Commission staff extensively and has provided, or made available, various associated HSTT environmental analysis documents such as: the Draft Environmental Impact Statement (DEIS), Marine Mammal Protection Act (MMPA) Letter of Authorization (LOA) application, and National Marine Fisheries Service (NMFS) proposed rule.

All of these documents, consistent with the analysis in the CD, provide detailed analysis and information regarding the Navy activities. Furthermore, during the time between the submission of the Navy's CD in January 2013 and the hearing, our staff worked closely with the Commission staff by answering questions and providing requested supplemental information.

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

While the Navy disagrees with the Commission's decision that the CD lacks in sufficient information, we value our relationship with the Commission and fully support using the remainder of the 90-day notice period to attempt to resolve our differences.

To facilitate this process we provide additional information in enclosure (1) that addresses the issues raised by the Commission in your letter. We believe this information will foster further discussions which we are hopeful can lead to resolving our differences. The Navy views its relationship with the State of California as essential to meeting its national security mandate and looks forward to continuing our professional relationship with the Commission and your Staff.

S. A. WEIKERT
Fleet Civil Engineer

Enclosure: Consistency Determination (CD-008-13) Additional Information

Copy to:
Chief of Naval Operations (N45)
Commander, Navy Region Southwest (N00, N40)
Commander, Third Fleet (N7)

2

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

1) The Navy's analysis relied on an incomplete analysis of the requirements of Section 30230, in that it only looked at one of the three tests (population-level effects), ignoring requirements of Section 30230 for the maintenance, enhancement, and, where feasible, restoration, of the overall marine environment, as well as for providing special protection for areas and species of special biological or economic significance.

NAVY RESPONSE: The Navy's analysis properly accounts for all aspects of the California Coastal Act's marine resource policy found in Section 30230. Section 30230 provides:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

The Navy does not interpret this policy as containing three separate tests with which a federal entity must comply. The Navy interprets the first sentence of Section 30230 as providing the general purpose driving the marine resource policy. While the Navy's section 30230 analysis focuses on population-level effects and sustaining biological productivity, the analysis also addresses special protection for areas and species of special biological or economic significance. Specifically, the Navy has an extensive suite of event-specific mitigation measures described in detail in the CD that provide protection for all areas and all marine mammals. In addition, the CD analysis contains a detailed description of the Navy's process for considering geographic mitigation measures and the rationale that those measures were not carried forward. Because the Navy's action sustains biological productivity and healthy populations of all species of marine organisms and provides necessary special protections, the general policy of maintaining, enhancing and where feasible, restoring, is also met.

Enclosure (1)

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

2) The Navy arbitrarily limited its analysis to only 10 of the 34 marine mammals present in the southern California study area, when the preponderance of the evidence is that 32 of the 34 species are present in the coastal zone.

NAVY RESPONSE: The analysis in the CD addresses those species the Navy considers coastal resources subject to federal consistency review. Coastal resources are those found in a state's coastal zone on a regular or cyclical basis. The species not addressed in the CD are either not regularly or cyclically found in the coastal zone or do not rely on coastal zone habitat. However, the Navy's associated EIS and the NMFS proposed rule fully address all marine mammals.

The determination on which species were included in the CD was based on a review of NMFS stock assessment reports, scientific literature, results from five years of Navy funded research and compliance monitoring within the SOCAL Range Complex (over $6M and 75,000 miles surveyed), and personal communication with NMFS Southwest Fisheries scientists as well as other non-government marine experts.

While acknowledging there can be scientific uncertainty and even differences in opinion as to movement patterns for some marine mammal species, the Navy's assessment factored in that degree of uncertainty in specifying the list of coastal zone species for inclusion in the CD. The Navy considered and included those species with a known, documented potential for coastal occurrence in terms of foraging and long-term occupancy. Conversely, the CD did not include species having a scientifically documented habitat beyond any reasonable coastal zone consideration (e.g., beaked whales), or infrequent occurrence mostly offshore within the SOCAL Range Complex portion of California (e.g., killer whales). The HSTT DEIS, LOA application, and NMFS proposed rule contain life history information and a full impact analysis and assessment for all marine mammal species thought to occur within the study area.

3) Even the Navy's population level effects analysis was questionable, as it was not supported by substantial evidence. Moreover, it did not include the type of analysis typically supplied in current-day marine mammal population analyses to estimate whether a proposed activity could result in marine mammal stocks falling below their optimal sustainable population levels, which was included in the analysis the Commission relied

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

on in its recent review of the Pacific Gas and Electric Company's high energy seismic survey, and which compared "Level A takes" (under the Marine Mammal Protection Act) against residual "Potential Biological Removal" rates, and "Level B takes" for listed species against minimum population estimates.

NAVY RESPONSE: The analysis in the CD and associated DEIS use the best available analysis methodology for assessing impacts on marine mammals developed in cooperation with NMFS, the federal agency with expertise and jurisdiction for marine mammals. In the proposed rule, NMFS found, regarding the analysis in the Navy's HSTT documents, that: "Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat and dependent upon the implementation of the mitigation and monitoring measures, NMFS preliminarily finds that the total taking from Navy training and testing exercises in the HSTT Study Area will have a negligible impact on the affected species or stocks. NMFS has proposed regulations for these exercises that prescribe the means of effecting the least practicable adverse impact on marine mammals and their habitat and set forth requirements pertaining to the monitoring and reporting of that taking."

4) The Navy provided no explanation as to why significant intensification of use of mid-frequency sonar was needed for military training and testing (e.g., an increase in "MF-1" sonar use (the loudest of the sonars) from 4,454 to 11,534 hours per year).

NAVY RESPONSE: Section 2.2 of the CD as well as Chapters 1 and 2 of the Navy's DEIS fully document the purpose and need for the proposed activities. The Navy also spoke about the additional requirements at the Commission hearing, explaining that the HSTT document addresses the 2014-2019 Navy requirements, which include flexibility for years during which there may be a significant surge in training based on real-world Navy deployment requirements.

Also, HSTT covers significantly more sources than prior documents, includes more areas, and adds research, development and testing activities. Previous documents only focused on training activities.

3

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

Finally, anti-submarine warfare continues to be a training priority for the Navy, and with the Navy and U.S. military's increasing focus on the Asia-Pacific region, the waters off Southern California will remain the focus of such training and testing.

5) The Navy failed to analyze and consider alternatives such as implementing "timearea" closures, as well as other mitigation measures previously adopted by the Commission in reviewing past Navy consistency determinations for Southern California Training and Testing (CD-086-06 and CD-049-08), measures which the Commission staff requested the Navy to analyze in its July 10, 2012, comments on the HSTT DEIS.

NAVY RESPONSE: The Navy fully considered spatial and temporal based mitigation measures, as well as all the Commission's previously adopted mitigation measures. Please see the Appendix C of CD 008-13 for further discussion where the Navy details the process used in developing and considering mitigation measures as well as the rationale for why candidate measures, after careful consideration, were eliminated.

The analysis within Navy's CD 008-13 addresses all mitigation measures identified as conditions by the Commission in prior CDs (CD-86-06 and CD049-08). As demonstrated by that analysis, the Navy's decision to eliminate measures is based on a finding that the measures either lacked a scientific basis for reducing impacts or had too great an impact on Navy training and testing. The analysis is particularly relevant to the Commission's proposed geographic restrictions. In addition, as the Navy described at the Commission hearing, the geographic areas addressed within the CD are the same areas the Navy has conducted sonar and explosive testing and training for decades without any significant impacts to the marine environment.

Finally, as stated at the hearing, the Navy's proposed mitigation measures are effective and appropriate for avoiding and minimizing impacts for all areas in the HSTT study area.

OTHER ITEMS NOTED BY THE COMMISSION

The Commission noted the Navy's refusal to avoid state and Federal MPAs. The establishment of all of the MPAs in the study area

SUBJECT: CONSISTENCY DETERMINATION (CD-008-13) ADDITIONAL INFORMATION

included recognition of the Navy ongoing activities within those MPAs, and a finding that those activities are compatible with the MPAs. For the State MPAs, from California Title 14, Section 632 states: "Nothing in this section expressly or implicitly precludes, restricts or requires modification of current or future uses of the waters identified as marine protected areas, special closures, or the lands or waters adjacent to these designated areas by the Department of Defense, its allies or agents." For the Channel Islands National Marine Sanctuary, the sanctuary's regulation, EIS, and Management Plan, all include and recognize the need for Navy to conduct its continuing training and testing activities in sanctuary waters.

The Commission noted a lack of sufficient information on fishing because the Navy has not implemented all the recommendations from a study conducted by the Navy in 2009. In that study, the Navy conducted interviews with members of the fishing community who made a number of recommendations. Since that time the Navy has addressed most all the recommendations and overall has significantly improved communication with the fishing community mostly through a significantly improved real-time website. Also, the Navy has established new safety zones around San Clemente Island that further reduce impacts on fishing access. The remaining recommendations, such as new cell towers, have largely been overcome by the improved website and communications, but are still being considered as part of the Navy's long-standing relationship with the fishing community. The Navy does not agree that this constitutes a lack of sufficient information.

5

DEPARTMENT OF THE NAVY
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IN REPLY REFER TO:
5090
Ser N01CE1/0198
February 12, 2013

Mr. Gerry Davis
Habitat Conservation Division
National Marine Fisheries Service, Pacific Islands Regional Office
1601 Kapiolani Boulevard, Suite 1110
Honolulu, Hawaii 96814-4700

Subj: ESSENTIAL FISH HABITAT (EFH) ASSESSMENT FOR THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT)

Dear Mr. Davis:

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the U.S. Navy has prepared the EFH Assessment for the HSTT activities conducted in the Pacific Ocean within the Southern California Range Complex, Silver Strand Training Complex, Hawaii Range Complex and a transit corridor on the high seas. The U.S. Navy's assessment concludes that EFH within the HSTT Study Area may be adversely affected by training and testing activities and requests initiation of the MSA's EFH consultation process.

Additional information on HSTT may be found at the project website, including the EFH Assessment and the Draft Environmental Impact Statement /Overseas Environmental Impact Statement prepared by the U.S. Navy to analyze potential environmental impacts that could result from activities under the Proposed Action. The website is located at: http://hstteis.com. The U.S. Navy's preferred alternative in the Draft EIS and analyzed in the EFH Assessment is Alternative 2.

We appreciate your continued support in helping the U.S. Navy to meet its environmental responsibilities. Please note that due to the large HSTT Study Area, a similar letter is concurrently being sent to the National Marine Fisheries Service's Southwest Regional Office, Habitat Conservation Division.

Our point of contact for the HSTT EFH Assessment is Ms. Julie Rivers, at 808-474-6391 or julie.rivers@navy.mil.

Sincerely,

L. M. FOSTER
By direction

Enclosures: 1. EFH Assessment for HSTT (CD-ROM)

Copy to: (w/o encl)
Dr. Kelly Ebert, Chief of Naval Operations (N454)
Ms. Michelle Magliocca, NMFS Office of Protected Resources
NMFS Southwest Regional Office

U.S. DEPARTMENT OF COMMERCE
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(808) 944-2200 · Fax: (808) 973-2941

L.M. Foster
U.S. Pacific Fleet
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

April 8, 2013

Dear Mr. Foster:

The Habitat Conservation Division of the NOAA Fisheries Service Pacific Islands Regional Office (NMFS PIRO) has reviewed the February 12, 2013 U.S. Department of the Navy's (Navy) Hawaii-Southern California Training and Testing (HSTT) Essential Fish Habitat (EFH) Assessment (5090 Ser N01CE1/0198). We appreciate the opportunity to offer the following comments pursuant to the EFH provision (§305(b)) of the Magnuson Stevens Fishery Conservation and Management Act (MSA;16 U.S.C. 1855(b)).

The proposed action is to conduct a variety of military training activities throughout the HSST study area, which includes the existing Navy Hawaii Range Complex (HRC), Southern California (SOCAL) Range Complex, Silver Strand Training Complex (SSTC), also Navy pierside locations outside of the range complexes, and transit corridors between Hawaii and California on the high seas. The proposed activities for these in-water areas include the detonation of underwater explosives, weapons firing, the use of active sonar, acoustics and electromagnetic devices, pile driving, deployment of seafloor devices and other in-water devices (e.g., remotely operated vehicles), vessel movement, and ship to shore transport of personnel, equipment and supplies. Sonar maintenance and gunnery exercises may also be conducted concurrently with ship transits that may occur outside the geographic boundaries of Navy range complexes.

NMFS PIRO has focused on evaluating the proposed activities as relevant to the HRC as the NMFS South West Regional Office has reviewed and commented on the activities occurring within the SOCAL Range Complex and SSTC. The HRC geographically encompasses an approximately 1200 nautical miles (nm) by 1600 nm ocean area bounded by 16 degrees (°) North to 43° North latitude and from 150° West longitude to the International Date Line. A subset of the water column (surface down to 1000 m depth from shore out to the outer Exclusive Economic Zone 200 mile boundary) and seafloor (shoreline down to 400m depth) within the HRC around the Hawaiians Islands chain has been designated as Essential Fish Habitat (EFH) and may support various life stages for the management unit species (MUS) identified under the Western Pacific Regional Fishery Management Council's Pelagic and Hawaii Archipelago Fishery Ecosystem Plans (FEPs). The MUS and life stages found within the area include: eggs, larvae, juveniles and adults of Coral Reef Ecosystem MUS (CRE-MUS); eggs, larvae, juveniles and adults of Bottomfish MUS (BMUS); eggs, larvae, juveniles and adults of Crustacean MUS

(CMUS); eggs, larvae, juveniles and adults of Precious Coral MUS (PCMUS); and juveniles and adults of Pelagic MUS (PMUS).

The proposed action would adversely affect EFH as a result of acoustic stressors (e.g., sonar, explosives, pile driving), electromagnetic devices, direct physical disturbance (e.g., vessels, seafloor devices, expended materials, pile driving), and contaminants (explosives and byproducts, metals, other chemicals and materials). Impacts associated with these activities would range in intensity and extent and would include increased turbidity, potential habitat loss or conversion, modifications in fish behavior, and physical injury or mortality. The duration of these impacts would be expected to range over spatial scales from temporary to permanent.

NMFS PIRO is concerned about the land-based portions of the HRC having been excluded from analysis within the EFH Assessment. Without an understanding of these connected land based activities, we are unable to evaluate the effect of these activities on EFH, and hence unable to provide conservation recommendations for these activities as required. We are also concerned that Navy's definition of impact as presented on page 4-2 of the EFH assessment may not appropriately capture what we consider to be adverse effects to EFH. For example, a "stressor" duration of a few hours, days or weeks can result in adverse effect to EFH that is more than temporary or minimal in nature. Navy has also determined throughout the document that adverse effect to EFH will be minimal due to calculation that the impact area from an individual stressor only represents a small proportion of the entire range complex/es. For example on p. 4-21 the Navy's calculated impact area from bottom detonations in HRC is 23,2388 square meters. This area may represent a small proportion of the entire HSST, but may on a local scale be considered a substantial adverse effect to EFH if it involves impact to coral reef or CREMUS EFH. We are also concerned that there will be unavoidable impacts from all the activities over time, which the EFH assessment does not address.

In taking into consideration the range of activities in HRC, the large local spatial scale of the project, and the potential for cumulative impacts, NMFS considers that the proposed activities in HRC may have more than minimal adverse effect to EFH. We recommend that the Navy avoid, minimize and offset adverse effect to EFH as per following:

1) Evaluate the impacts to EFH from the land-based portions of the HRC such as any activities occurring on the Pacific Missile Range Facility (PMRF), Naval Station Pearl Harbor, Marine Corp Base Hawaii (MCBH), and Marine Corps Training Area- Bellows, and work together with NMFS to implement measures to mitigate any identified adverse effects to EFH.

2) Avoid, to the greatest extent practicable, conducting all training and testing activities in HRC for EFH that has been designated as a Habitat Area of Concern (HAPC) for CREMUS (e.g. Kaneohe Bay). Also avoid conducting activities that have impact to seafloor in areas designated as bottom EFH for PCMUS, and in HAPC for BMUS. Avoidance of these areas will eliminate risk of impact to these important habitats. (Please refer to the Western Pacific Regional Fishery Management Council's Hawaii Archipelago FEP for these EFH designations).

3) Increase the distance between activities resulting in acoustic non-impulsive stressors and importantly explosive impulsive stressors and coral reefs to greater than the currently proposed 0-320 yards (0-293 m). This will provide a greater protection/buffer zone around coral reefs hence minimize impact to these sensitive systems. Navy may wish to consider mirroring the distances proposed for the floating vegetation and kelp paddies in southern California for each of the stressors as listed on page 5-2.

4) Develop and implement a protocol for immediate clean-up of unexploded ordinance also for floating debris such as parachutes in areas designated as EFH for juvenile and adult life stages for CREMUS (all bottom around the Hawaiian Islands shallower than 100 m depth). Unexploded ordinance may cause direct impacts to EFH if triggered after use, and parachutes become marine debris that may move with currents, tides and waves and trap fish and abrade corals in their path.

5) Operate amphibious vessels such that they, in transitioning between land and sea, minimize turbidity and sedimentation and avoid abrasion impact to corals and dense seagrass beds present in and near operational paths at all locations including at the MCBH, Marine Corps Training Area- Bellows, and the Kawaihae Pier.

6) Ensure that any expected also unexpected unavoidable adverse effects to EFH be identified, and fully offset. For example, if damage to coral reef resources occurs from unexploded ordinance being blown in place during removal, or from a vessel grounding on top of a reef, the lost coral reef resources should be replaced. NMFS PIRO can offer guidance and technical assistance where needed and wherever possible to help Navy during this process.

We appreciate the opportunity to comment on this HSTT project and wish to continue engaging and working with the Navy where needed to support this important mission, while ensuring the appropriate level of protection of NOAA trust resources. If you have any questions regarding this determination, contact Danielle Jayewardene at 808 944-2162 (danielle.jayewardene@noaa.gov).

Sincerely,

Gerry Davis
Assistant Regional Administrator
Habitat Conservation Division

3

DEPARTMENT OF THE NAVY
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IN REPLY REFER TO:
5090
Ser N01CE1/0481
17 Apr 2013

Mr. Gerry Davis
Habitat Conservation Division
National Marine Fisheries Service,
Pacific Islands Regional Office
1601 Kapiolani Boulevard, Suite 1110
Honolulu, HI 96814-4700

Dear Mr. Davis:

SUBJECT: ESSENTIAL FISH HABITAT (EFH) ASSESSMENT FOR THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

Thank you for the comments you provided in your letter dated April, 8 2013. Your letter correctly acknowledges that the scope of the HSTT Proposed Action is limited to the Navy's various in-water training and testing activities throughout the HSTT Study Area. You also indicated that because land-based activities are not included in the analysis in the EFH assessment, that you are unable to provide conservation recommendations pursuant to Section 305(b).

Although HSTT analysis is limited to in-water activities, land-based activities and associated mitigation measures have been previously analyzed and evaluated by the Navy and NMFS PIRO as part of the Hawaii Range Complex (HRC) EIS. The Navy did not re-analyze the land portions of the HRC because land-based activities will not be altered by the HSTT Proposed Action. Likewise, ballistic missile defense activities at the Pacific Missile Range Facility (PMRF) were not re-analyzed.

For reference, please see NMFS PIRO letter dated April 7, 2008, in which NMFS concluded that if the proposed mitigation measures are implemented, "[n]o further conservation recommendations are necessary at this time."

Notwithstanding the conclusion that you cannot offer conservation recommendations, I would like to address the enumerated comments/recommendations provided in your letter.

Recommendations 1 and 5 relate to evaluation of land-based activities at various locations in Hawaii and the development of mitigation measures for certain activities that transition from sea to land, such as amphibious landings. As noted above, these activities have been thoroughly analyzed and evaluated by the Navy and NMFS and

SUBJECT: ESSENTIAL FISH HABITAT (EFH) ASSESSMENT FOR THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

mitigation measures have been put in place to minimize or avoid any adverse impacts to EFH. For example, amphibious landings are restricted to specific areas of designated beaches through mapped sandy beaches at PMRF, Marine Corp Base Hawaii and Marine Corp Training Area Bellows, therefore avoiding areas of Habitat Area of Particular Concern (HAPC) and other EFH.

Recommendation 2 requests avoiding, to the greatest extent practicable, all training and testing activities in EFH that has been designated HAPC for Coral Reef Ecosystem Management Unit Species (MUS), as well as to avoid conducting activities that have impact to the seafloor in EFH for Precious Coral MUS and HAPC for Bottom Fish MUS. Although it is impracticable to avoid all designated areas for all activities, the Navy is in fact proposing to implement the following measures to avoid adverse impacts to EFH:

- The Navy avoids and minimizes impacts to coral by conducting underwater detonations primarily in locations where these activities have historically occurred, for example, Puuloa Underwater Range, Barbers Point Underwater Range, Lima Landing and Ewa Training Minefield;
- Most training and testing activities are conducted in open ocean areas away from sensitive EFH, HAPC, or special aquatic sites;
- The Navy will not conduct precision anchoring or explosive mine countermeasure and neutralization activities within 350 yd.(320 m)of surveyed shallow coral reefs, live hardbottom, artificial reefs, or shipwrecks (EFHA at Section 5.2; EIS at Chapter 5)

Recommendation 3 appears to request a greater activity buffer around coral reefs; however, a specific range is not specified. The recommendation does state that the current proposed buffer extends to 320 yds, which is incorrect. The current proposal includes a mitigation zone up to 350 yds (320 m), which the Navy believes is adequate to minimize any adverse impacts to coral reefs. The mitigation zone of 350 yd. (320 m) is based on the estimated maximum seafloor impact zone for explosives (EIS at Section 5.3.3.2.1.1, Shallow Coral Reefs, Hardbottom Habitat, Artificial Reefs, and Shipwrecks; Section 3.3, Marine Habitats). The mitigation zones for floating vegetation are specifically for marine mammal and turtle mitigations as indicators of the potential presence of marine mammals or sea turtles and do not have a scientific relevance to coral.

Finally, recommendations 4 and 6 appear to be related to emergency actions and accidents associated with unexploded ordnance which are outside the scope of this Proposed Action. An emergency real world

SUBJECT: ESSENTIAL FISH HABITAT (EFH) ASSESSMENT FOR THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) STUDY AREA

operation is not considered a training or testing activity, and operating procedures are in place depending on the type of emergency. In developing an appropriate response for these types of incidents, the Navy considers numerous factors including safety of personnel and equipment, as well as, minimizing impacts to the environment.

To the extent that recommendation 4 refers to debris as a result of a training activity, the Navy will remove associated debris to the extent practicable. For example, wherever blanks/pyrotechnics or plastics for wrapping C4 charges are used, they are collected at the conclusion of the exercise when practicable. Some targets, torpedoes and other non-expendable materials are recovered to the extent practicable.

Furthermore, the majority of military training items would be expended in the open ocean, where substrates would primarily be clays and silts with few benthic invertebrates. Military expended material in the coastal portions of the Study Area would be limited to small-caliber projectiles, flares, and target fragments (EIS at Section 3.3, Marine Habitats; EFH at Section 4.1.3.4, Military Expended Materials).

We again thank you for your support of this critical project and appreciate your timely response. We also would like to reaffirm the Navy's commitment to working with your agency in support of our mutual goals. My point of contact for this matter is Ms. Julie Rivers (808) 474-6391, or e-mail: julie.rivers@navy.mil.

Sincerely,

L. M. FOSTER
Director, Environmental Readiness
By direction

Copy to:
Chief of Naval Operations (N454)

3

U.S. DEPARTMENT OF COMMERCE
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L.M. Foster
Director, Environmental Readiness
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Department of the Navy
250 Makalapa Drive
Pearl Harbor, Hawaii 96860-3131

July 26, 2013

Dear Mr. Foster:

The Habitat Conservation Division of the NOAA Fisheries Service Pacific Islands Regional Office (NMFS) has reviewed the U.S. Department of the Navy's (Navy) April 17, 2013 response to NMFS April 8, 2013 Essential Fish Habitat recommendations provided pursuant to the EFH provision (§305(b)) of the Magnuson Stevens Fishery Conservation and Management Act (MSA;16 U.S.C. 1855(b)) for the Navy proposed Hawaii-Southern California Training and Testing (HSTT) activities. The NMFS EFH recommendations, restated in italics below, were addressed by Navy in the response letter as per following:

NMFS recommendation #1: *Evaluate the impacts to EFH from the land-based portions of the HRC such as any activities occurring on the Pacific Missile Range Facility (PMRF), Naval Station Pearl Harbor, Marine Corp Base Hawaii (MCBH), and Marine Corps Training Area-Bellows, and work together with NMFS to implement measures to mitigate any identified adverse effects to EFH.*

> **Navy response:** Navy has already thoroughly analyzed and evaluated land-based activities as part of the 2008 Hawaii Range Complex (HRC) EIS and developed mitigation measures to avoid and minimize environmental impacts from these activities. These activities remain unchanged.

NMFS recommendation #2: *Avoid, to the greatest extent practicable, conducting all training and testing activities in HRC for EFH that has been designated as a Habitat Area of Concern (HAPC) for CREMUS (e.g. Kaneohe Bay). Also avoid conducting activities that have impact to seafloor in areas designated as bottom EFH for PCMUS, and in HAPC for BMUS. Avoidance of these areas will eliminate risk of impact to these important habitats. (Please refer to the Western Pacific Regional Fishery Management Council's Hawaii Archipelago FEP for these EFH designations).*

Navy response: Navy cannot practicably avoid all designated areas for all activities, but proposes to implement certain measures to avoid and minimize impacts to coral.

NMFS recommendation #3: *Increase the distance between activities resulting in acoustic non-impulsive stressors and importantly explosive impulsive stressors and coral reefs to greater than the currently proposed 0-320 yards (0-293 m). This will provide a greater protection/buffer zone around coral reefs hence minimize impact to these sensitive systems. Navy may wish to consider mirroring the distances proposed for the floating vegetation and kelp paddies in southern California for each of the stressors as listed on page 5-2.*

Navy response: Navy has already specified a 350 yard (320 m) mitigation zone, or buffer, around surveyed coral reefs, live hard bottom, artificial reefs and shipwrecks based on estimated maximum seafloor impact zone for explosives.

NMFS recommendation #4: *Develop and implement a protocol for immediate clean-up of unexploded ordnance also for floating debris such as parachutes in areas designated as EFH for juvenile and adult life stages for CREMUS (all bottom around the Hawaiian Islands shallower than 100 m depth). Unexploded ordnance may cause direct impacts to EFH if triggered after use, and parachutes become marine debris that may move with currents, tides and waves and trap fish and abrade corals in their path.*

Navy response: Navy considers emergency actions associated with unexploded ordnance outside the scope of the proposed HSTT action and states that there are already operating procedures in place depending on the type of emergency. Navy reiterates that the majority of training items would be expended in the open ocean, where substrates would be primarily clays and silts. Navy will however remove associated debris (blanks/pyrotechnics or plastic for wrapping C4 charges, some targets, torpedoes and non-expendable materials) to the extent practicable as is related to training and testing activities.

NMFS recommendation #5: *Operate amphibious vessels such that they, in transitioning between land and sea, minimize turbidity and sedimentation and avoid abrasion impact to corals and dense sea grass beds present in and near operational paths at all locations including at the MCBH, Marine Corps Training Area- Bellows, and the Kawaihae Pier.*

Navy response: see response to EFH recommendation #1; Navy already analyzed and evaluated land-based activities as part of the 2008 Hawaii Range Complex (HRC) EIS. Amphibious landings are restricted to specific areas of designated beaches through mapped sandy beaches at the PMRF, MCBH and Bellows areas and avoid impacting sensitive EFH.

NMFS recommendation #6: *Ensure that any expected also unexpected unavoidable adverse effects to EFH be identified, and fully offset. For example, if damage to coral reef resources occurs from unexploded ordnance being blown in place during removal, or from vessel grounding on top of a reef, the lost coral reef resources should be replaced. NMFS PIRO can offer guidance and technical assistance where needed and wherever possible to help Navy during this process.*

2

Navy response: see response to EFH recommendation #4; Navy considers emergency actions associated with unexploded ordnance outside the scope of the proposed HSTT action. The majority of training items would be expended in the open ocean, where substrates would be primarily clays and silts.

Despite review of the HSTT EFH assessment and Navy's response letter, NMFS initially remained unclear and concerned about impacts associated with the HSTT activities particularly to sensitive EFH such as the known beds of precious coral Management Unit Species (MUS) and Habitat Areas of Particular Concerns (HAPCs) designated for bottomfish MUS and coral reef ecosystem MUS. NMFS and Navy thus held meetings on 7/2/13 and 7/11/13 where NMFS provided Navy with maps clarifying the location of the sensitive EFH and HAPCs so Navy could specify the HSTT activities that generally occur within these specific areas. Table 1 in the enclosed attachment 1 summarizes NMFS understanding of the nature of these HSTT activities. Following these discussions, NMFS determines that adverse effects to EFH can be avoided and minimized given that Navy factors the listed sensitive EFH and HAPCs into decisions as areas to avoid when conducting HSTT activities that result in more than minimal impact to seafloor. As an outcome of the meetings, NMFS and Navy agreed to the following action items:

i. Navy modify the January 2013 HSTT EFH assessment to clarify that Navy will to the greatest extent practicable conduct training and testing activities that result in more than minimal impacts to seafloor (e.g. from detonations of underwater explosives) outside of sensitive EFH, specifically: the nine (9) known precious corals; the seven (7) newly proposed HAPCs for bottomfish; and the shallow water HAPCs for coral reef ecosystem.

ii. Navy incorporate maps of the sensitive EFH areas referenced above in (i) and listed in Table 1, in Navy's Protective Measures Assessment Program (PMAP) so Navy personnel are aware of and able to make decisions to avoid these areas wherever possible in conducting HSTT activities with impacts to the seafloor.

iii. NMFS provide Navy with Global Positioning System (GPS) coordinates also metadata for the GIS habitat layers for these sensitive EFH areas so Navy can incorporate these into the new version of PMAP.

iv. Navy modify language in the EFH assessment, and EIS if appropriate, to use the terminology: "surveyed or known shallow-water coral reefs including mesophotic coral reef systems to an approximate maximum depth of 200 meters based on the approximate depth of the photic zone (Valentine et al. 2005)", rather than "surveyed shallow" coral reefs in regards to the proposed 350 yard buffer zone around coral reefs. Modification will including adding a foot note to Table 5-1 defining "surveyed" coral reef.

v. Navy share with NMFS the Navy point of contact and/or the emergency response protocols in place for Navy's management of vessel groundings, unexploded ordnance removal activities, etc., including any past EFH consultations that have occurred for such activities.

In conclusion, NMFS appreciates Navy's efforts to work with us to ensure that there is protection of our trust resources while conducting the HSTT activities which we understand are an essential part of Navy's mission. In the event that there are more than minimal impacts to inshore water quality, precious corals, bottomfish habitat and/or coral reefs from the HSTT activities, Navy should notify NMFS so that NMFS may provide the appropriate technical expertise needed to access the impacts and identify any additional measures necessary. If you have any questions and/or comments, or request further assistance, please don't hesitate to contact Danielle Jayewardene at 808 944-2162 (danielle.jayewardene@noaa.gov).

Sincerely,

Gerry Davis
Assistant Regional Administrator
Habitat Conservation Division

Cc by e-mail
Julie Rivers, US Pacific Fleet
John Van name, US Pacific Fleet
Cory Scott, NAVFAC Pacific
Meredith Fagan, NAVFAC Pacific
Alexander Stone, US Pacific Fleet

4

Attachment 1

Table 1. NMFS understanding of HSTT activities potentially conducted within Sensitive EFH and HAPCs in the Hawaiian Islands:

Sensitive EFH for BOTTOMFISH MUS	
Kaena Point HAPC	Potentially Anti-Submarine Warfare (ASW) activities, although minimally as ASW activities typically occur in depths > 200 m. ASW include sonar activities, with some resulting military expended materials such as sonobuoys. No detonation of underwater explosives.
Kaneohe Bay HAPC	Potentially ASW activities, but unlikely due to HAPCs relatively shallow depth of ~100 m. No detonation of underwater explosives.
Makapuu HAPC	Potentially ASW activities, but unlikely due to HAPCs relatively shallow depth of ~100 m. No detonation of underwater explosives.
Penguin Bank HAPC	ASW activities occur as this is the only easily accessible shallow seafloor area in MHI. No detonation of underwater explosives.
Pailolo HAPC	ASW activities occur as this is the only easily accessible shallow seafloor area in MHI. No detonation of underwater explosives.
N. Kahoolawe HAPC	ASW activities occur as this is the only easily accessible shallow seafloor area in MHI. No detonation of underwater explosives.
Hilo HAPC	Potentially ASW activities, but unlikely due to this HAPC's remote location. No detonation of underwater explosives.
Sensitive EFH for PRECIOUS CORAL MUS	
Wepac bed/HAPC	Potentially ASW activities, but unlikely due to its remote location. No detonation of underwater explosives.
Brooks Bank bed/HAPC	Potentially ASW activities, but unlikely due to its remote location. No detonation of underwater explosives.
180 Fathom Bank bed	Potentially ASW activities, but unlikely due to its remote location. No detonation of underwater explosives.
Kauai south border bed	ASW activities occur, but no detonation of underwater explosives.
Kaena Pt bed	ASW activities occur, but no detonation of underwater explosives.
Makapuu bed/HAPC	ASW activities occur, but no detonation of underwater explosives.
Auau channel/HAPC	ASW activities occur as this is the only easily accessible shallow seafloor area in MHI. No detonation of underwater explosives. No contact between subs and corals growing on bottom.
Keahole Pt bed	Potentially ASW activities, but unlikely due to this bed's remote location. No detonation of underwater explosives.
Milolii- South Pt bed	Potentially ASW activities, but unlikely due to this bed's remote location. No detonation of underwater explosives.
Sensitive EFH for CORAL REEF ECOSYSTEM MUS	
NWHI: all substrate above 20 m	Potentially ASW activities, but unlikely due to the remoteness of the NWHI and the shallow depth of areas. No detonation of underwater explosives.
MHI: all MPAs and various inshore sites, e.g. Kaneohe	Potentially ASW activities, but unlikely due the inshore nature and generally shallow depths (< 50m) of these sites. No detonation of underwater explosives.

5

Correction:

Paragraph 1 on page 4 should read: "...Navy should notify NMFS so that NMFS may provide the appropriate technical expertise needed to *assess* the impacts and identify any additional measure necessary."

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PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0199
February 12, 2013

Mr. Eric Chavez
Habitat Conservation Division
National Marine Fisheries Service, Southwest Regional Office
501 West Ocean Boulevard
Long Beach, California 90802-4213

Subj: ESSENTIAL FISH HABITAT (EFH) ASSESSMENT FOR THE HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT)

Dear Mr. Chavez:

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the U.S. Navy has prepared the EFH Assessment for the HSTT activities conducted in the Pacific Ocean within the Southern California Range Complex, Silver Strand Training Complex, Hawaii Range Complex and a transit corridor on the high seas. The U.S. Navy's assessment concludes that EFH within the HSTT Study Area may be adversely affected by training and testing activities and requests initiation of the MSA's EFH consultation process.

Additional information on HSTT may be found at the project website, including the EFH Assessment and the Draft Environmental Impact Statement/Overseas Environmental Impact Statement prepared by the U.S. Navy to analyze potential environmental impacts that could result from activities under the Proposed Action. The website is located at: http://hstteis.com. The U.S. Navy's preferred alternative in the Draft EIS and analyzed in the EFH Assessment is Alternative 2.

We appreciate your continued support in helping the U.S. Navy to meet its environmental responsibilities. Please note that due to the large HSTT Study Area, a similar letter is concurrently being sent to the National Marine Fisheries Service's Pacific Islands Regional Office, Habitat Conservation Division.

Our point of contact for the HSTT EFH Assessment is Mr. Alex Stone, at 619-545-8128 or alexander.stone@navy.mil.

Sincerely,

L. M. FOSTER
By direction

Enclosures: 1. EFH Assessment for HSTT (CD-ROM)

Copy to: (w/o encl)
Dr. Kelly Ebert, Chief of Naval Operations (N454)
Ms. Michelle Magliocca, NMFS Office of Protected Resources, NMFS Pacific Islands Regional Office

From: Eric Chavez - NOAA Federal
To: Stone, Alexander CIV COMPACFLT N01CE1AS
Cc: Johnson, Chip CIV COMPACFLT N01CE1CJ; Scott, Cory L CIV NAVFAC PAC, EV; Boerger, Christiana M CIV NAVFAC SW; Rivers, Julie A CIV COMPACFLT, N01CE1JR; Steve Edmondson - NOAA Federal; Christina Fahy - NOAA Federal; Monica DeAngelis - NOAA Federal; Michelle Magliocca - NOAA Federal; Danielle Jayewardene - NOAA Affiliate
Subject: Re: EFH Assessment for HSTT
Date: Wednesday, April 03, 2013 6:21:45

Alex,

NOAA's National Marine Fisheries Service (NMFS) has reviewed the U.S. Department of the Navy's (Navy) Hawaii-Southern California Training and Testing (HSTT) Essential Fish Habitat (EFH) Assessment and offers the following comments pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

The proposed project is to conduct a variety of military training activities throughout the in-water areas off the coast of Southern California, at Navy pierside locations, in the transit corridor between Hawaii and Southern California, and around the Hawaiian Islands. As agreed to previously with the Navy, NMFS Southwest Regional Office will focus this consultation primarily on those activities occurring within the Southern California region, including the Southern California (SOCAL) Range Complex Study Area and Silver Strand Training Complex (SSTC), and to some extent, the transit corridor. Situated between Dana Point and San Diego, the SOCAL Range Complex Study Area extends more than 600 nautical miles (nm) southwest into the Pacific Ocean and covers approximately 120,000 nm2 of sea space. The SSTC is an integrated set of training areas located on and adjacent to the Silver Strand, a narrow isthmus separating San Diego Bay from the Pacific Ocean. Although not part of any defined range complex, the transit corridor provides adequate air, sea, and undersea space to conduct training and some sonar maintenance and testing while en route between Southern California and Hawaii. Those activities that occur within the Hawaii Range Complex Study Area will be addressed in a separate EFH consultation between the Navy and NMFS Pacific Islands Regional Office. The proposed project includes the detonation of underwater explosives, weapons firing, the use of active sonar, acoustics and electromagnetic devices, pile driving, deployment of seafloor devices and other in-water devices (e.g., remotely operated vehicles), vessel movement, and ship to shore transport of personnel, equipment and supplies. Sonar maintenance and gunnery exercises may also be conducted concurrently with ship transits that may occur outside the geographic boundaries of Navy range complexes.

The proposed project occurs within EFH for various federally managed fish species within the Coastal Pelagic Species, Pacific Coast Groundfish, and Highly Migratory Species Fishery Management Plans (FMPs). In addition, the proposed project occurs within estuarine habitat and in the vicinity of seagrass (e.g., eelgrass, surfgrass), rocky reef, and kelp habitat, which have been identified as habitat areas of particular concern (HAPC) under the Pacific Coast Groundfish FMP. Designated HAPC are not afforded any additional regulatory protection under MSA; however, Federal projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

The proposed project would adversely affect EFH as a result of acoustic stressors (e.g., sonar, explosives, pile driving), electromagnetic devices, direct physical disturbance (e.g., vessels, seafloor devices, expended materials, pile driving), and contaminants (explosives and byproducts, metals, other chemicals and materials). Impacts associated with these activities would range substantially and would include increased turbidity, potential habitat loss or conversion, modifications in fish behavior, and physical injury or mortality. The duration of these impacts would also be expected to range from temporary to permanent. However, many of the activities associated with the HSTT project have been addressed through extensive coordination between NMFS and the Navy during previous EFH consultations for the SOCAL Range Complex and SSTC, and the assessment of impacts to EFH from those consultations is consolidated into this EFH Assessment. Based on information within the HSTT EFH Assessment and recent communications with Navy staff members, Alexander Stone and Chip Johnson, the Navy will implement conservation measures developed during those previous EFH consultations to avoid or minimize impacts to EFH from this project. For instance, the Navy performed benthic habitat mapping surveys throughout much of the SSTC as a result of that EFH consultation, and is also in the process of collecting similar benthic habitat data for the San Clemente Island region. Data

collected from these surveys will be used by the Navy to avoid impacts to sensitive habitats (e.g., seagrass, understory algal communities, kelp, rocky reefs, sea fans or sea palms, etc.) to the greatest extent practicable when conducting underwater demolition exercises or other activities that may impact bottom habitat. The Navy has also agreed to use benthic habitat information collected during the EFH five-year review for Pacific Coast Groundfish, once it is provided by NMFS, to assist their efforts to avoid impacts to sensitive habitats. In addition, the detonation of any explosives larger than 0.033 pounds net explosive weight will occur outside of San Diego Bay in the nearshore environment over sandy bottom. During the SSTC EFH consultation, the Navy also agreed to provide general location data for underwater explosives, mitigate for 1.13 acres of eelgrass impacts using credits from their San Diego Bay mitigation bank, and implement protective measures to minimize impacts to California grunion (Leuresthes tenuis). Therefore, NMFS believes the proposed conservation measures are sufficient to avoid, minimize or offset impacts to EFH and has no additional EFH Conservation Recommendations to provide at this time. Thank you for consulting with NMFS.

Regards,
Eric

On Wed, Feb 13, 2013 at 4:07 PM, Stone, Alexander CIV COMPACFLT N01CE1AS <alexander.stone@navy.mil> wrote:
> Eric,
>
> Hi - hope all is well. We have completed the EFH Assessment associated with the Hawaii-SOCAL Testing and Training (HSTT) EIS. Attached is the transmittal letter submitting to NMFS. The hard copy of the letter and EFHA (with a CD-ROM) are coming to you in the mail. I'd email it, but it's too large of a file.
>
> As I think you know the EIS (and EFHA) address the in-water only testing and training we do in SOCAL and Hawaii. It consolidates the in-water activities from the SSTC and SOCAL EISs. It also adds some new area (transit lanes between SOCAL and Hawaii) and is more comprehensive in terms of acoustic and explosive sources. That said, in general the activities are the same as SSTC and SOCAL. The real driver behind the EIS is the need for new MMPA authorization as the five-year permits we have will be expiring.
>
> We look forward to working with you on this consultation. Chip Johnson and I are the primary pocs but we will also involve other Navy SMEs. Also, we are submitting this EFHA also to the Hawaii NMFS office for EFH under their jurisdiction.
>
> V/r,
> Alex Stone
> PACFLT Environmental Readiness

--
Eric Chavez
Habitat Conservation Division
NOAA's National Marine Fisheries Service

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0621
3 May 12

Mr. William Aila Jr.
Hawaii State Historic Preservation Officer
Department of Land and Natural Resources
State Historic Preservation Division
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, HI 96707

Dear Mr. Aila Jr.:

In accordance with implementation of regulations for Section 106 of the National Historic Preservation Act, the subject project has been evaluated and determined to be an undertaking as defined in 36 CFR 800.16(y).

Project Description

The Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) Proposed Action encompasses the ocean areas located around the Hawaiian Islands; however, activities would be mainly restricted to the Hawaii Operating Area (OPAREA), see enclosures (1 and 2). Activities specific to the Proposed Action include gunnery and explosive exercises as well as the use and maintenance of sonar equipment. The Study Area also includes select pierside locations within Pearl Harbor where Navy surface ship and submarine sonar maintenance testing occur.

National Environmental Policy Act

In addition to requesting your Section 106 review, the Navy is also providing the HSTT Draft EIS/OEIS (Enclosure 3) for your review and comment. In compliance with the National Environmental Policy Act (NEPA) of 1969, the Navy will be holding five open house meetings to inform the public and allow those concerned an opportunity to comment on the Proposed Action, alternatives under consideration, and the adequacy and accuracy of the analysis in the Draft EIS/OEIS. All comments

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3 May 12

(oral or written) submitted during the 60-day public review period (May 11, 2012, to July 10, 2012) will become part of the public record on the Draft EIS/OEIS and will be responded to in the Final EIS/OEIS.

There will be no formal presentation; however, Navy representatives will be available to provide information and answer questions about the proposed action and Draft EIS/OEIS. The open house public meetings will be held from **5 to 8 p.m.** at the following locations:

In Hawaii

Tuesday, June 12, 2012
Wilcox Elementary School Cafeteria
4319 Hardy St., Lihue

Wednesday, June 13, 2012
Maui Waena Intermediate School Cafeteria
795 Onehee Ave., Kahului

Thursday, June 14, 2012
East Hawaii Cultural Center
141 Kalakaua St., Hilo

Friday, June 15, 2012
McKinley High School Cafeteria
1039 S. King St., Honolulu

In California

Wednesday, June 20, 2012
Marina Village Conference Center Starboard Room
1936 Quivira Way, San Diego

The Draft EIS/OEIS is also available in electronic form on the project website at www.HSTTEIS.com.

Area of Potential Effect

The Area of Potential Effect (APE) would encompass areas in the open ocean area within the Hawaii OPAREA, as detailed on the enclosures (1 and 2).

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Identification of Historic Properties

A majority of the training activities for the HSTT are to take place within open ocean portions of the Hawaii OPAREA. The Papahānaumokuākea Marine National Monument, an area having both cultural and ecological significance, is located just northwest of the Hawaii OPAREA but within the Hawaii portion of the HSTT Study Area. It was placed on the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage List in 2010.

Near-shore activities would take place within Pearl Harbor, which in itself is a National Historic Landmark listed on both the National Register of Historic Places (NRHP) and the Hawai'i State Register of Historic Places (Site 50-80-13-9992). There are also several known culturally significant and historic sites located within the Pearl Harbor area.

Determination of Effect

Training and testing activities would continue in existing localities, as specified in the Hawaii Range Complex (HRC) EIS. These activities have been historically conducted or are similar to those historically conducted for some time with no cultural resources being affected throughout the years. For example, all artillery and explosive exercises are to take place within the open ocean, away from where there are any known cultural or historical resources, and the only pierside activities would be those associated with Navy surface ship and submarine sonar maintenance testing. While sonar maintenance testing would take place within the Pearl Harbor National Historic Landmark, the proposed activities would not impact any of the cultural and historic sites in the vicinity. The Navy is not proposing any new activities in the Papahanaumokuakea Marine National Monument or activities that are different from those currently conducted in this area. Therefore, proposed activities are consistent with those activities currently conducted in this area, are consistent with those described in the sanctuary's designation document, and are not being changed or modified in a way that would require consultation with the National Marine Fisheries Service.

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Based on the above, the proposed activities within the HSTT EIS/OEIS would result in a "no historic properties affected" determination in accordance with Section 106 implementing regulations under 36 CFR 800.4(d)(1). Additionally, the Navy surface ship and submarine sonar maintenance testing would not affect the significant historic qualities of the Pearl Harbor National Historic Landmark. The Navy requests your concurrence with our determination of effect. As defined in 36 CFR 800.5(c), we will assume your concurrence if no objection is received from your office within 30 days of receipt of this letter.

Should you have any questions regarding the undertaking, please contact Jeffrey Fong at 808-472-1383 or at Jeffrey.fong@navy.mil. You may send written comments to: Naval Facilities Engineering Command, Southwest Attention: HSTT EIS/OEIS Project Manager – EV21.CS 1220 Pacific Highway, Building 1, Floor 3 San Diego, CA 92132-5190.

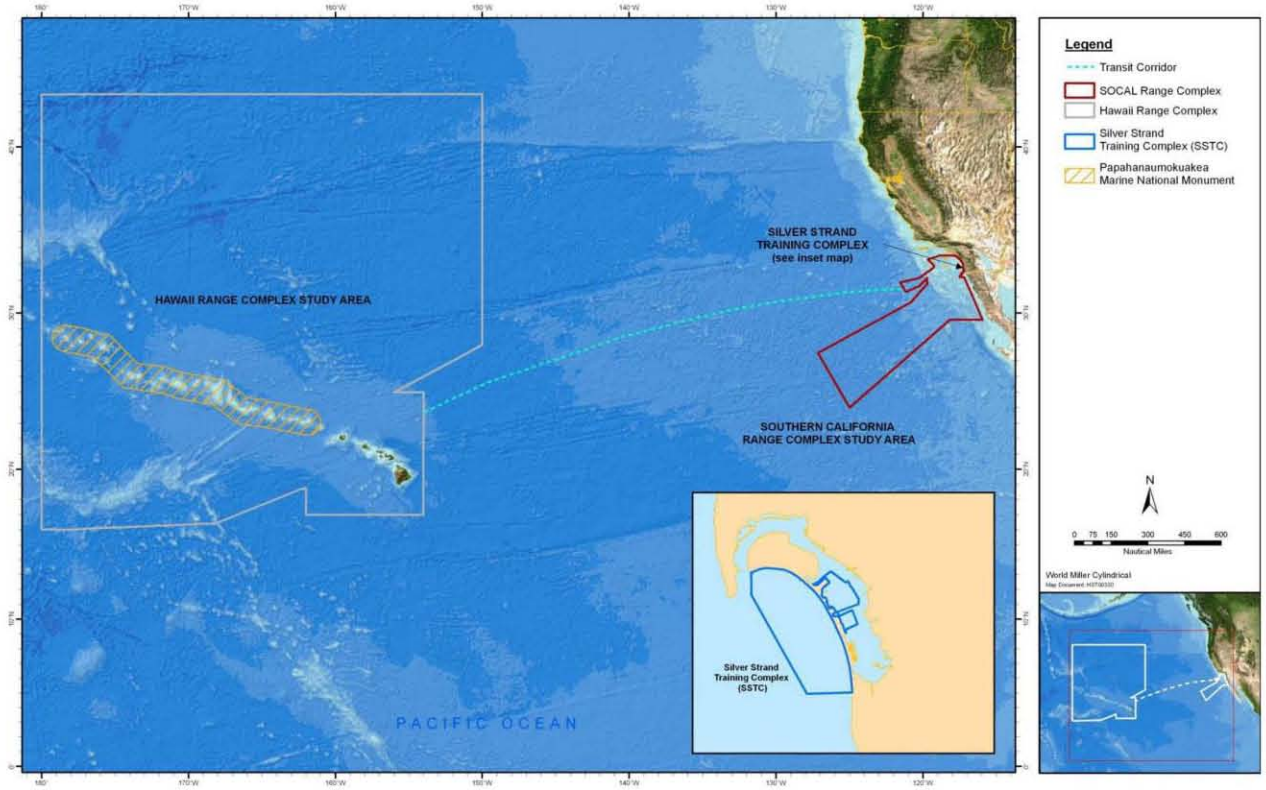
Comments may also be submitted on-line at the website (www.HSTTEIS.com). All comments must be postmarked or received online by **July 10, 2012,** to be considered in the Final EIS/OEIS.

Sincerely,

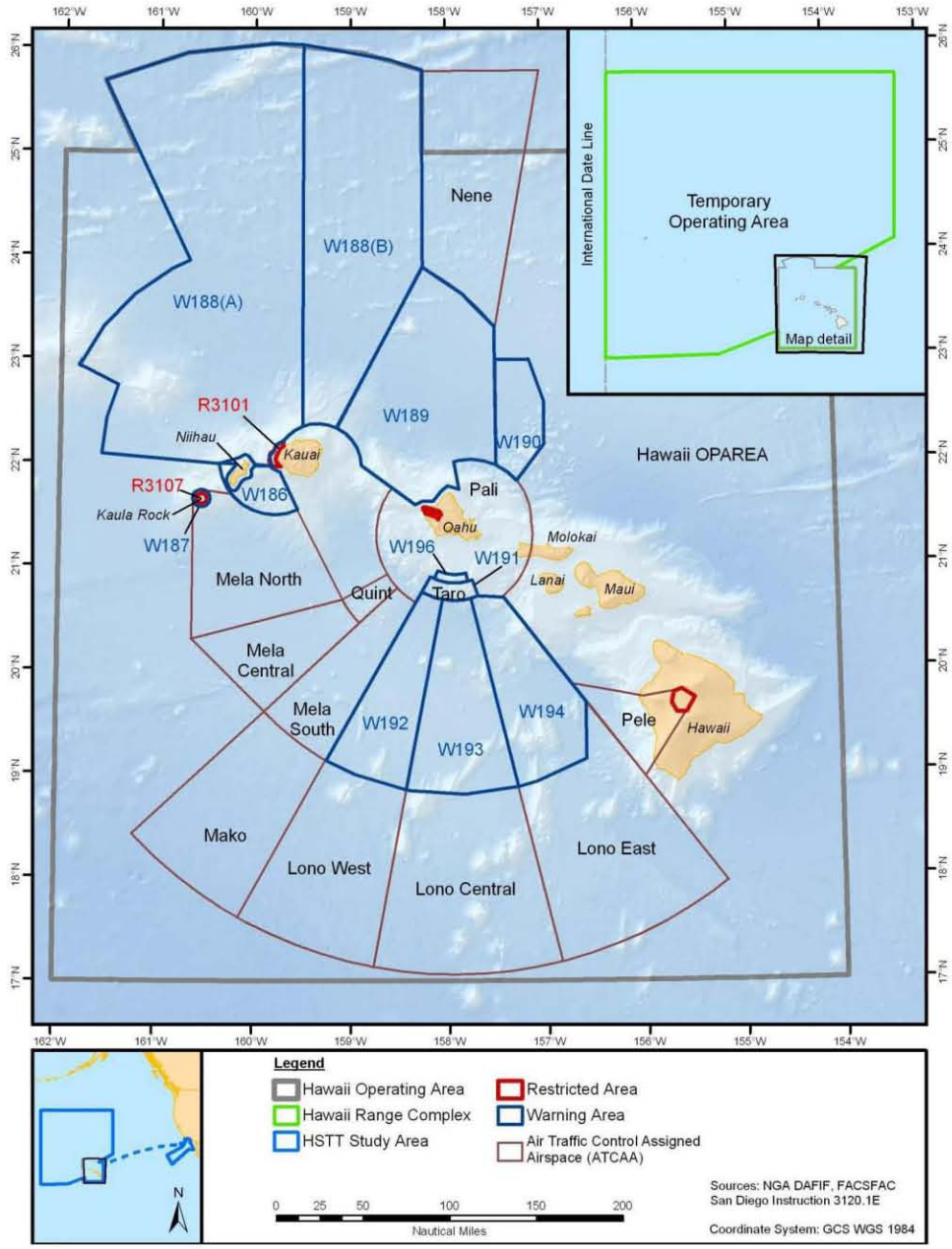
Larry M. Foster

L. M. FOSTER
Director, Environmental Readiness
By direction

Enclosures: 1. Figure of the HSTT Area
2. Figure of the HRC
3. CD-ROM of the Draft EIS/OEIS for the Navy's HSTT Activities



Enclosure (1) HSTT Study Area



Enclosure (2) Hawaii Range Complex

DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0622
3 May 12

Mr. Wayne Donaldson, F.A.I.A
State Historic Preservation Officer
Department of Parks and Recreation
1416 9th Street, Rm. 1442
Sacramento, CA 94296-0001

Dear Sir:

In accordance with implementation of regulations for Section 106 of the National Historic Preservation Act, the subject project has been evaluated and determined to be an undertaking as defined in 36 CFR 800.16(y).

Project Description

The Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) Proposed Action includes training and testing activities within Southern California (SOCAL), Hawaii, and the open ocean Transit Corridor between them however, activities would be mainly restricted to the open ocean portions of the SOCAL Range Complex within the SOCAL Operating Area (OPAREA) including the waters surrounding San Clemente Island, boat lanes and anchorages offshore of the Silver Strand Training Complex (SSTC), and the bayside training areas within San Diego Bay, see enclosures (1 through 5). Activities specific to the Proposed Action include gunnery and explosive exercises as well as the use and maintenance of sonar equipment. The Study Area also includes select pierside locations within San Diego Bay where Navy surface ship and submarine sonar maintenance testing occur.

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National Environmental Policy Act

In addition to requesting your Section 106 review, the Navy is also providing the HSTT Draft EIS/OEIS (Enclosure 6) for your review and comment. In compliance with the National Environmental Policy Act (NEPA) of 1969, the Navy will be holding open house meetings to inform the public and allow those concerned an opportunity to comment on the Proposed Action, alternatives under consideration, and the adequacy and accuracy of the analysis in the Draft EIS/OEIS. All comments (oral or written) submitted during the 60-day public review period (May 11, 2012, to July 10, 2012) will become part of the public record on the Draft EIS/OEIS and will be responded to in the Final EIS/OEIS.

There will be no formal presentation; however, Navy representatives will be available to provide information and answer questions about the proposed action and Draft EIS/OEIS. The open house public meetings will be held from **5 to 8 p.m.** at the following locations:

In California
Wednesday, June 20, 2012
Marina Village Conference Center Starboard Room
1936 Quivira Way, San Diego

In Hawaii
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McKinley High School Cafeteria
1039 S. King St., Honolulu

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3 May 12

The Draft EIS/OEIS is also available in electronic form on the project website at www.HSTTEIS.com.

Area of Potential Effect

The Area of Potential Effect (APE) would encompass open ocean areas in the SOCAL Range Complex within the OPAREA, and boat lanes and anchorages offshore of the SSTC including the bayside training areas within San Diego Bay, as detailed on the enclosures (1 through 5).

Identification of Historic Properties

A majority of the training activities for the HSTT are to take place within the open ocean areas within the SOCAL Range Complex and OPAREA, and boat lanes and anchorages offshore of the SSTC including the bayside training areas within San Diego Bay. The Study Area contains no identified National Register-listed or eligible sites.

Submerged cultural resources in the waters around San Clemente Island include pleasure craft, sport and commercial fishers, and cargo and military vessels. Of these 68 submerged cultural resources, 22 are within 12 nm of San Clemente Island and seven are beyond the territorial limit. Submerged aircraft are also reported off San Clemente Island. Submerged cultural resources identified include 35 shipwrecks, 14 unknown or unidentified vessels, 17 aircraft, an anchor, and the abandoned Sea Lab.

On the bay side of Silver Strand peninsula, three shipwrecks are in or near the training beaches. Unnamed wrecks are recorded in shallow water at the northern end of Delta South beach, in the middle of San Diego Bay, and at the mouth of Fiddler's Cove. The ages and cultural value of these wrecks are not known.

On the ocean side of the peninsula, three shipwrecks are located near SSTC training areas: the bark Narwhale (sank in 1934); the submarine S-142: and the Subchaser YC689(sank in

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3 May 12

1943). The destroyer *USS Hogan* (DD178), a military aircraft (S2F Tracker), and a sunken sailboat are located offshore, south of SSTC and west of the City of Imperial Beach.

Known cultural resources in San Diego Bay have not been inventoried. However, cultural resources were reviewed for the San Diego Deepening at Tenth Avenue Marine Terminal project (EDAW 2005). This review identified three known submerged cultural features: a shipwreck (the *Della*), an 1887 marine utility cable, and a sunken Ford Model T. The EDAW study identified 24 cultural resources with unknown location, but known to be lost in the San Diego area, including schooners, barges, a submarine, clippers, gas and oil screws, a yacht, a bark, a ferry, a ship, and a steamer

Determination of Effect

Training and testing activities would continue in existing localities, as specified in the SOCAL EIS/OEIS and the SSTC EIS. These activities have been historically conducted or are similar to those historically conducted for some time with no cultural resources being affected throughout the years. For example, artillery and explosive exercises are to take place within the open ocean or near-shore areas, away from where there are any known cultural or historical resources, and the only pierside activities would be those associated with Navy surface ship and submarine sonar maintenance testing within San Diego Bay. Pile-driving for Elevated Causeway training at SSTC would subject nearshore sediments to vibration, disruption, and compaction at SSTC and would occur only in the Oceanside Boat Lanes 1-10 and in the bayside Bravo training area. Proposed activities are consistent with those activities currently conducted in these areas.

Based on the above, the proposed activities within the HSTT EIS/OEIS would result in a "no historic properties affected" determination in accordance with Section 106 implementing regulations under 36 CFR 800.4(d)(1). The Navy requests your concurrence with our determination of effect. As defined in 36 CFR 800.5(c), we will assume your concurrence if no objection is received from your office within 30 days of receipt of this letter.

5090
Ser N01CE1/0622
3 May 12

Should you have any questions regarding the undertaking, please contact Dr. Andy Yatsko at 619-532-2800 or at andy.yatsko@navy.mil. You may send written comments to:

Naval Facilities Engineering Command, Southwest
Attention: HSTT EIS/OEIS Project Manager – EV21.CS
1220 Pacific Highway, Building 1, Floor 3
San Diego, CA 92132-5190

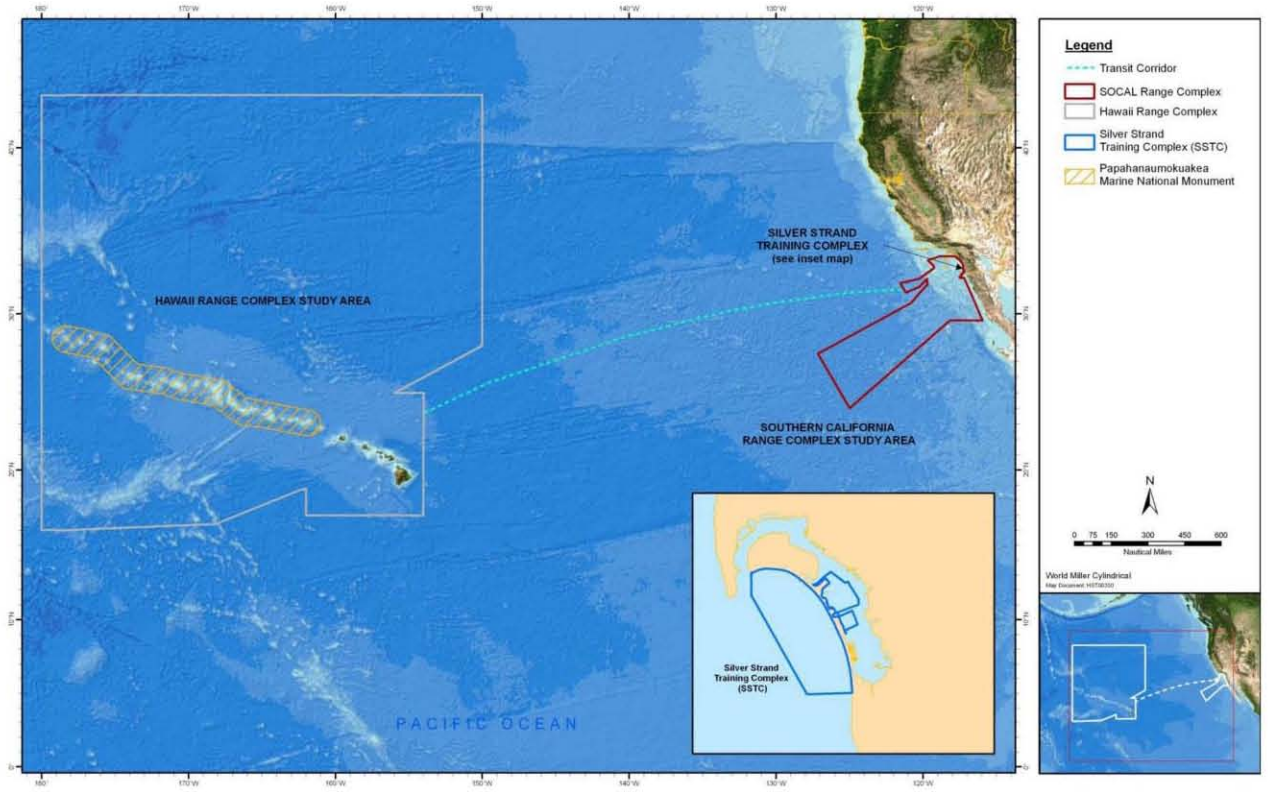
Comments may also be submitted on-line at the website (www.HSTTEIS.com). All comments must be postmarked or received online by **July 10, 2012,** to be considered in the Final EIS/OEIS.

Sincerely,

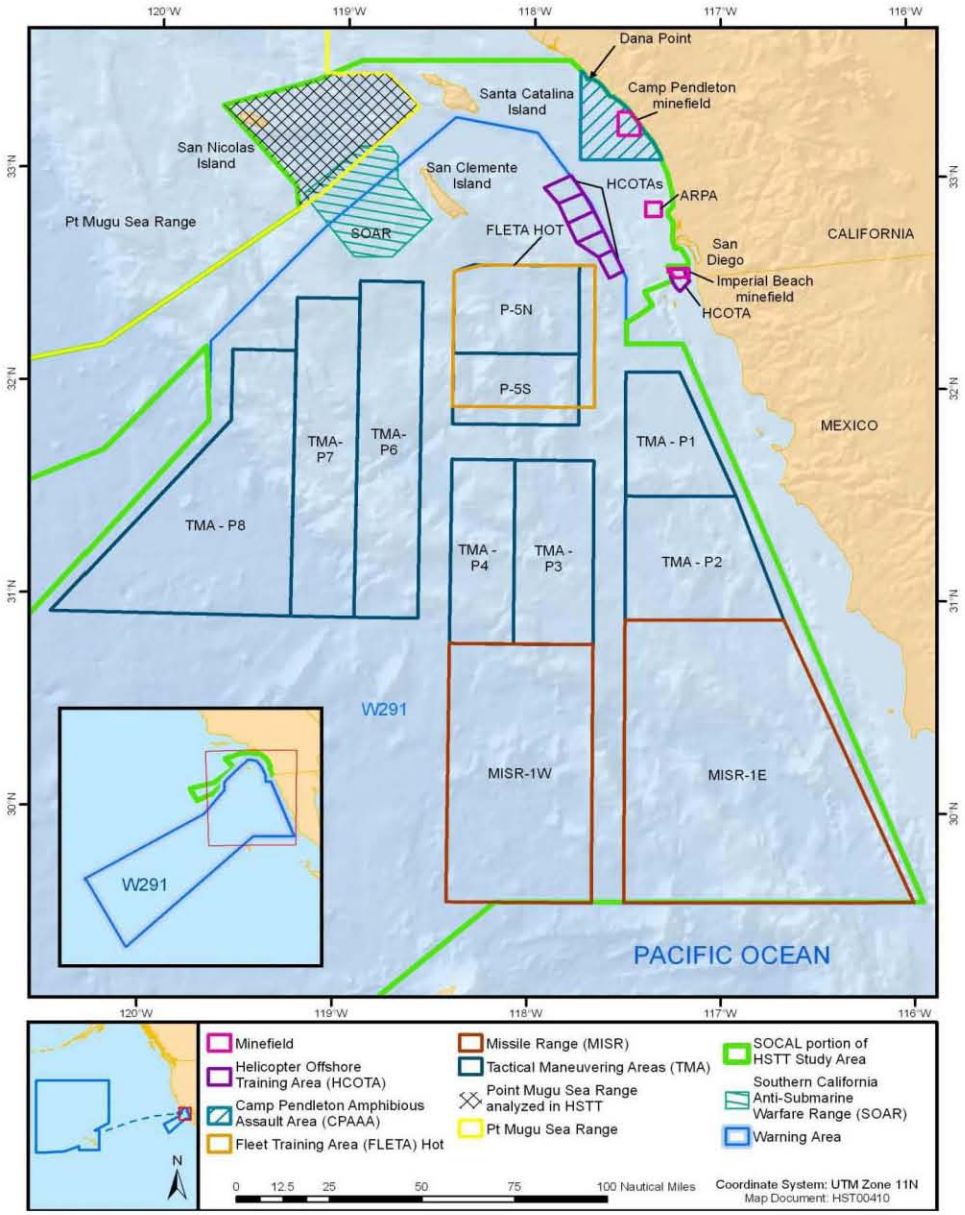
Larry M. Foster

L. M. FOSTER
Director, Environmental Readiness
By direction

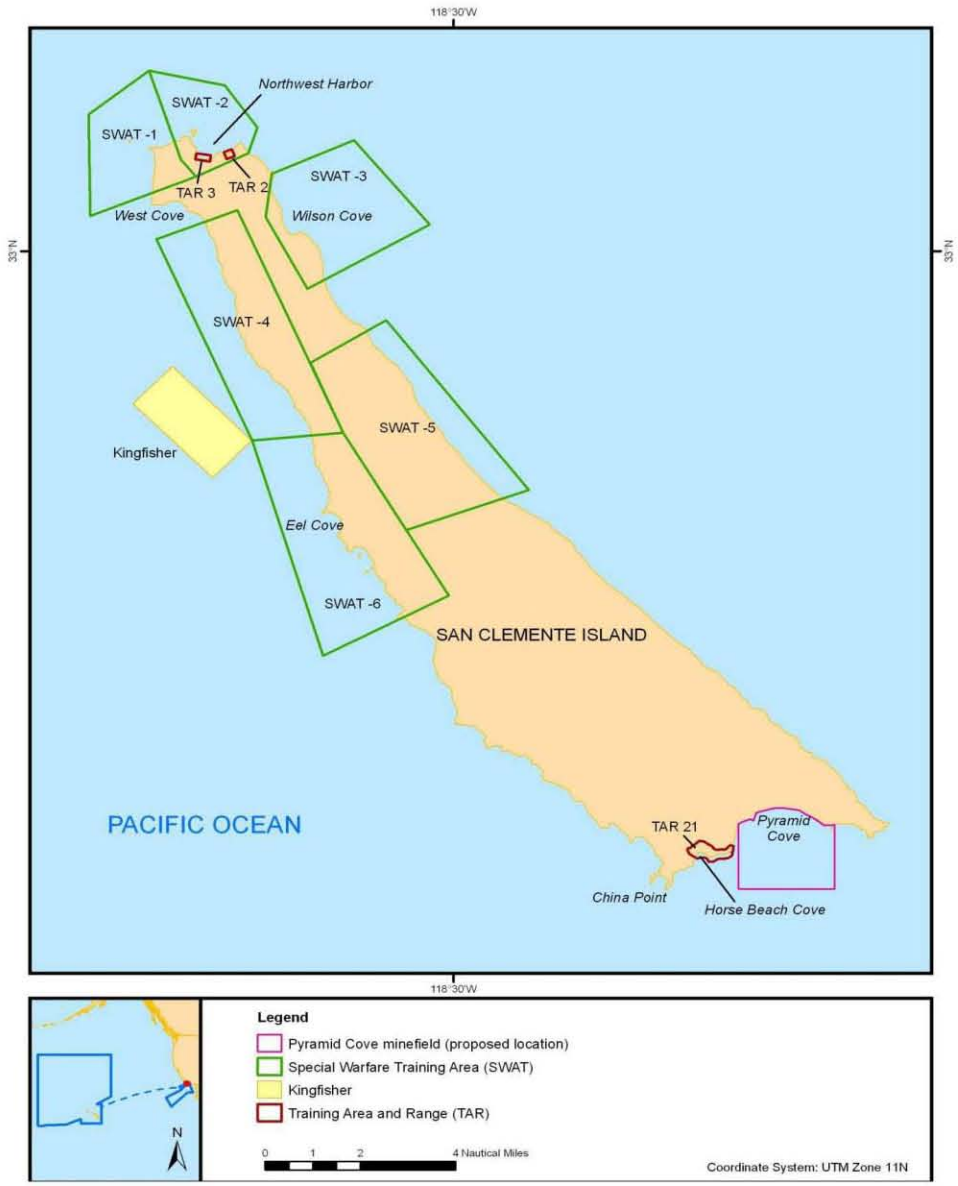
Enclosures:
1. Figure of the HSTT Area
2. Figure of the SOCAL Range Complex and OPAREA
3. Figure of San Clemente Island Nearshore Training Areas
4. Figure of San Clemente Island Offshore Training Areas
5. Figure of SSTC
6. CD-ROM of the Draft EIS/OEIS for the Navy's HSTT Activities



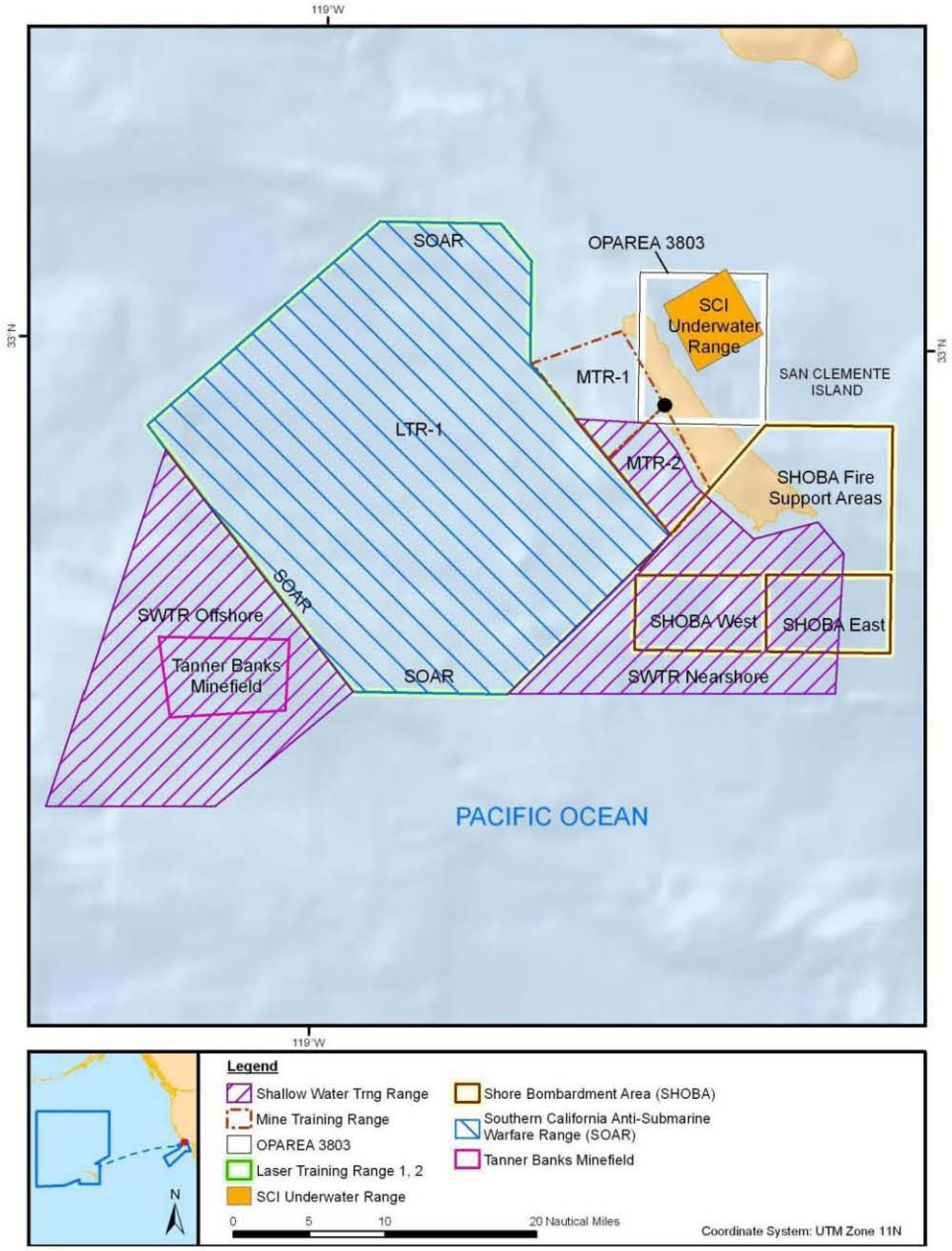
Enclosure (1) HSTT Study Area



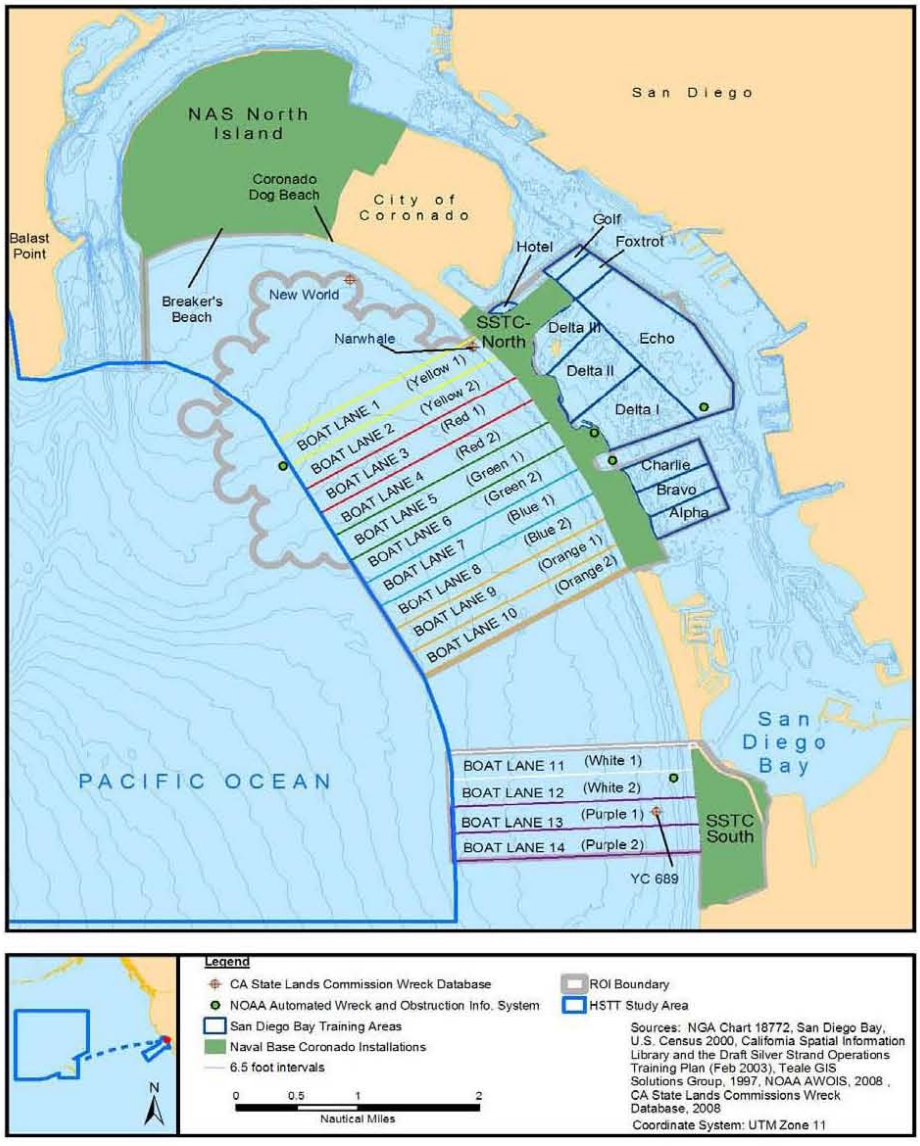
Enclosure (2) Southern California Range Complex and OPAREA



Enclosure (3) San Clemente Island Nearshore Training Areas



Enclosure (4) San Clemente Island Offshore Training Areas



Enclosure (5) Silver Strand Training Complex

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY EDMUND G. BROWN, JR., *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

June 5, 2012

Reply in Reference To: USN120509B

Andy Yatsko
Naval Facilities Engineering Command, SW
1220 Pacific Highway, Building 1, Floor 3
San Diego, CA 92132-5190

RE: Hawaii-Southern California Training and Testing Activities, Various Ocean Areas, Southern California

Dear Mr. Yatsko:

Thank you for requesting my comments on the above-referenced undertaking. Pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act, the United States Navy (Navy) is requesting my concurrence with a finding of No Historic Properties Affected.

The Navy plans to renew training and testing activities in the waters off of Southern California, Hawaii, and the Open Ocean Transit corridor between these two regions. The majority of activities off of California will occur within the Southern California Operating Area (OPAREA), including the waters surrounding San Clemente Island, boat lanes and anchorages offshore of the Silver Strand Training Complex (SSTC), and the bayside training areas within San Diego Bay. Activities specific to this undertaking include gunnery and explosive exercises as well as the use and maintenance of sonar equipment. The project area also includes select pier side locations within San Diego Bay where Navy surface ship and sonar maintenance testing occurs.

The Navy defines the Area of Potential Effects (APE) for this activity as the open ocean areas in the Southern California Range Complex with the OPAREA, and boat lanes and anchorages offshore of the SSTC, including the bayside training areas within San Diego Bay. In addition to your letter, you have provided maps and a CDR containing environmental studies undertaken in the project area.

Submerged cultural resources in the waters around San Clemente Island include pleasure craft, sport and commercial fishers, cargo ships, and military vessels. Of these resources, twenty-two are sited within twelve nautical miles of San Clemente Island and seven are beyond the territorial limit.

On the bay side of Silver Strand peninsula, three shipwrecks are in or near the training beaches. Unnamed wrecks are sited in shallow water at the northern end of Delta

South Beach, in the middle of San Diego Bay, and at the mouth of Fiddler's Cove. The ages and cultural value of these wrecks are unknown.

On the ocean side of the peninsula, three shipwrecks are located near SSTC training areas: the bark Narwhale (sank in 1934); the submarine S-142; and the Subchaser YC689 (sank in 1943). The destroyer USS Hogan, a military aircraft, and a sunken sailboat are located offshore, south of SSTC and west of the City of Imperial Beach.

Known cultural resources in San Diego Bay have not been comprehensively inventoried. However, cultural resources were reviewed for the San Diego Deepening at Tenth Avenue Marine Terminal Project (EDAW 2005). This review identified three known submerged cultural features: a shipwreck (identified as the *Della*), an 1887 marine utility cable, and a sunken Ford Model T. The EDAW study identified an additional twenty-four resources known to have been lost in the San Diego area, including schooners, barges, a submarine, clippers, gas and oil screws, a yacht, a bark, a ferry, a ship, and a steamer.

Training and testing activities are consistent with actions currently conducted in the above-referenced areas. For example, artillery and explosive exercises will take place within the Open Ocean or near-shore areas, away from where there are any known cultural or historical resources. Pile driving for elevated causeway training at STC will subject near shore sediments to vibration, disruption, and compaction at SSTC and will occur only in the Oceanside Boat Lanes 1-10 and in the Bayside Bravo Training Area. Proposed activities area consistent with activities currently conducted in these areas.

Having reviewed your submittal, I concur with your Finding of Effect. I also agree that you have adequately determined the undertaking's APE. Please be advised that in the event of a change in project description or an inadvertent discovery, you may have additional responsibilities under 36 CFR Part 800.

Thank you for considering historic properties during project planning. If you have any questions or comments, please contact Tristan Tozer of my staff at (916) 445-7027 or by email at ttozer@parks.ca.gov.

Sincerely,

Jenan Saunders
(for) Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING RONA (August 2013)

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MEMORANDUM FOR THE RECORD

From: Commander, U.S. Pacific Fleet (N01CE1)

Subj: Applicability Analyses for Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement – Operations in State of California Waters

Ref: (a) 40 Code of Federal Regulation, 51.853(b)

Encl: (1) Record of Non-Applicability for Hawaii-Southern California Training and Testing in State of California Waters, South Coast Air Basin; and

(2) Record of Non-Applicability for Hawaii-Southern California Training and Testing in State of California Waters, San Diego Air Basin.

1. Enclosure (1) is a Record of Non-Applicability (RONA) for those U.S. Navy training and testing activities that are expected to occur annually in State of California waters in South Coast Air Basin (SCAB). The Preferred Alternative (Alternative 2) emissions of carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and particulates under 10 microns (PM_{10}) and under 2.5 microns ($PM_{2.5}$), in SCAB are provided in Enclosure 1. A comparison of the relevant criteria air pollutant emissions of the Proposed Action with Reference (a) shows that the anticipated emissions are *de minimis*.

2. Enclosure (2) is a RONA for those U.S. Navy training and testing activities that are expected to occur annually in State of California waters in San Diego Air Basin (SDAB). The Preferred Alternative (Alternative 2) emissions of CO, NO_x, and VOC in SDAB are provided in Enclosure 2. A comparison of the relevant criteria air pollutant emissions of the Proposed Action with Reference (a) shows that the anticipated emissions are *de minimis*.

3. If there are any questions or if additional information is needed, please call Alex Stone at (619) 545-8128.

Lay M. Foster 7/25/2013

L.M. Foster

Director, Fleet Environmental Readiness

DO NOT FORWARD TO PERSONS WITHOUT DEMONSTRATED OFFICIAL NEED FOR THE INFORMATION CONTAINED HEREIN

HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING RONA (August 2013)

FOR OFFICIAL USE ONLY: MAY NOT BE RELEASABLE UNDER FOIA

NAVY RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The Proposed Action falls under the Record of Non-Applicability (RONA) category, and is documented with this RONA.

Action Proponents: Commander, United States Pacific Fleet
Naval Sea Systems Command
Naval Air Systems Command

Proposed Action: Hawaii-Southern California Training and Testing (HSTT)

Proposed Action Location: Southern California Range Complex, CA

Proposed Action and Emissions Summary:

See attached Conformity Analysis

Affected Air Basin: South Coast Air Basin

Date RONA prepared: June 12, 2013

RONA prepared by: Naval Facilities Engineering Command, Southwest

Attainment Area Status and Emissions Evaluation Conclusion:

To the best of my knowledge and belief, the information contained in this General Conformity Applicability Analysis is correct and accurate. By signing this statement, I am in agreement with the finding that the total of all reasonably foreseeable direct and indirect emissions that will result from this action is below the *de minimis* threshold set forth in 40 Code of Federal Regulations 51.853(b). Accordingly, it is my determination that this action conforms to the applicable State Implementation Plan.

RONA Approval:

Signature: Larry M. Foster

Name/Rank: Larry M. Foster/GS-15 Date: 25 July 2013

Position: Director, Fleet Environmental Readiness Activity: Commander, U.S. Pacific Fleet

Enclosure 1

DO NOT FORWARD TO PERSONS WITHOUT DEMONSTRATED OFFICIAL NEED FOR THE INFORMATION CONTAINED HEREIN

SUBJECT: CONFORMITY ANALYSIS FOR NAVY TRAINING AND TESTING, SOUTH COAST AIR BASIN

INTRODUCTION

The Proposed Action falls under the Record of Non-Applicability (RONA) category pursuant to 40 Code of Federal Regulations (C.F.R.) Parts 52 and 93, and the basis for exemption from conformity requirements is documented with this RONA.

The United States (U.S.) Environmental Protection Agency (USEPA) published *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule*, in the Federal Register (40 C.F.R. Parts 6, 51, and 93) on November 30, 1993. The U.S. Navy published *Clean Air Act General Conformity Guidance* in Chief of Naval Operations Instruction (OPNAVINST) 5090.1C CH-1 (18 July 2011). These publications provide guidance to document Clean Air Act Conformity requirements. Federal regulations state that no department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity that does not conform to an applicable implementation plan. The federal agency that is the action proponent is responsible for determining whether a federal action conforms to the applicable implementation plan before the Proposed Action is taken (40 C.F.R. Part 1, Section 51.850[a]).

Federal actions may be exempt from conformity determinations if they do not exceed designated *de minimis* levels for criteria pollutants as set forth in 40 C.F.R. § 93.153(c) (Table 1). These standards are reflected in Appendix F of OPNAVINST 5090.1C CH-1.

Table 1: De Minimis Thresholds for Conformity Determinations

Pollutant	Nonattainment or Maintenance Area Type	*De Minimis* Threshold (TPY)
Ozone (VOC or NO_x)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
$PM_{2.5}$	All nonattainment & maintenance	100
Lead (Pb)	All nonattainment & maintenance	25

Notes: NO_X = nitrogen oxides, Pb = lead, PM_{10} = particulate matter under 10 microns, $PM_{2.5}$ = particulate matter under 2.5 microns, SO_2 = sulfur dioxide, NO_2 = nitrogen dioxide, TPY = tons per year, VOC = volatile organic compounds

PROPOSED ACTION

Proposed Action Summary

The Proposed Action consists of increases in training and testing activities on the at-sea portions of the Southern California (SOCAL) Range Complex required to address a training shortfall, and to accommodate expected force-structure changes and range enhancements. The assessment of air quality impacts includes all military training activities in the SOCAL Range Complex involving vessels, aircraft, and weapons systems in State of California waters.

Proposed Action Emissions

Aircraft

To estimate aircraft emissions, the operating modes (e.g., "cruise" mode), number of hours of operation, and types of engine for each type of aircraft were evaluated. All aircraft are assumed to travel to and from training ranges at or above 3,000 feet (ft.) (914 meters [m]) above ground level and, therefore, their transits to and from the ranges do not affect surface air quality. Air combat maneuvers and air-to-air missile exercises are primarily conducted at altitudes well in excess of 3,000 ft. (914 m) above ground level and, therefore, are not included in the estimated emissions of criteria air pollutants. Activities or portions of those training or testing activities occurring below 3,000 ft. (914 m) are included in emissions estimates. Examples of activities typically occurring below 3,000 ft. (914 m) include those involving helicopter platforms such as mine warfare, anti-surface warfare, and anti-submarine warfare training and testing activities.

The types of aircraft used and the numbers of flights flown under the No Action Alternative are derived from historical data. The types of aircraft identified include the typical aircraft platforms that conduct a particular training or testing exercise (or the closest surrogate when information is not available), including range support aircraft (e.g., non-Navy commercial air services). For the Preferred Alternative, estimates of future aircraft sorties are based on evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of aircraft, future activity levels are estimated from the distribution of baseline activities.

Time on range (activity duration) under the No Action Alternative was calculated from average times derived from range records and Navy subject matter experts. To estimate time on range for each aircraft activity under the Preferred Alternative, the average flight duration approximated in the baseline data was used in the calculations. Estimated altitudes of activities for all aircraft were obtained from aircrew members in operational squadrons. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of aircraft type, altitude, and flight duration. Where aircraft testing activities were dissimilar to training activities, assumptions for time on range were derived from Navy subject matter experts.

Air pollutant emissions were estimated based on the Navy's Aircraft Environmental Support Office Memorandum Reports for individual aircraft categories (Aircraft Emission Estimates: Mission Operations). For aircraft for which Aircraft Environmental Support Office emission factors were not available, emission factors were obtained from other published sources.

The emissions calculations for each alternative conservatively assume that each aircraft activity is separately conducted. In practice, a testing activity may be conducted during a training flight. Two or more training activities also may be conducted during one flight (e.g., chaff or flare exercises may occur during electronic warfare operations; or air-to-surface gunnery and air-to-surface bombing activities may occur during a single flight operation). Using conservative assumptions may produce elevated aircraft

emissions estimates, but accounts for the possibility (however remote) that each aircraft training and testing activity is separately conducted.

Vessels

The methods of estimating marine vessel emissions involve evaluating the type of activity, the number of hours of operation, the type of propulsion, and the type of onboard generator for each vessel type. The types of surface ships and numbers of activities for the No Action Alternative are derived from range records and Navy subject matter experts regarding vessel participant data. For the Preferred Alternative, estimates of future ship activities are based on anticipated evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of ships, estimates of future activities are based on the historical distribution of ship use. Navy aircraft carriers and submarines are nuclear-powered, and have no air pollutant emissions associated with propulsion.

For surface ships, the durations of activities were estimated by taking an average over the total number of activities for each type of training and testing. Emissions for baseline activities and for future activities were estimated based on discussions with exercise participants. In addition, information provided by subject-matter experts was used to develop a breakdown of time spent at each operational mode (i.e., power level) used during activities in which marine vessels participated. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of vessel type, power level, and activity duration.

Emission factors for marine vessels were obtained from the database developed for Naval Sea Systems Command by John J. McMullen Associates, Inc. (John J. McMullen Associates 2001). Emission factors were provided for each marine vessel type and power level. The resulting calculations provided information on the time spent at each power level in each part of the Study Area, emission factors for that power level (in pounds of pollutant per hour), and total emissions for each marine vessel for each operational type and mode.

The pollutants for which calculations are made include exhaust total hydrocarbons, CO, NO_x, PM, CO_2, and SO_2. For non-road engines, all particulate matter emissions are assumed to be smaller than PM_{10}, and 92 percent of the particulate matter from gasoline and diesel-fueled engines is assumed to be smaller than $PM_{2.5}$. For gaseous-fueled engines (liquefied petroleum gas/compressed natural gas), 100 percent of the particulate matter emissions are assumed to be smaller than $PM_{2.5}$.

The emissions calculations for each alternative conservatively assume that each vessel activity is separately conducted and separately produces vessel emissions. In practice, one or more testing activities may take advantage of an opportunity to travel at sea aboard and test from a vessel conducting a related or unrelated training activity. It is also probable that two or more training activities may be conducted during one training vessel movement (e.g., a ship may conduct large-, medium-, and small-caliber surface-to-surface gunnery exercises during one vessel movement). Furthermore, multiple unit level training activities may be conducted during a larger composite training unit exercise. Using conservative assumptions may produce elevated vessel emissions estimates, but accounts for the possibility (however remote) that each training or testing activity is separately conducted.

Naval Gunfire, Missiles, Bombs, Other Munitions and Military Expended Material

Naval gunfire, missiles, bombs, and other types of munitions used in training and testing activities emit air pollutants. To estimate the amounts of air pollutants emitted by ordnance during their use, the numbers and types of munitions used during training or testing activities are first totaled. Next, generally accepted emissions factors (AP-42, Compilation of Air Pollutant Emission Factors, Chapter 15: Ordnance Detonation ([U.S. Environmental Protection Agency 1995]) for criteria air pollutants are applied to the

total amounts. Finally, the total amounts of air pollutants emitted by each munition type are summed to produce total amounts of each criteria air pollutant under each alternative.

The estimated annual operational emissions for the No Action Alternative and Preferred Alternative are presented in Table 2. Annual emissions are expected to increase from the No Action Alternative levels to the Preferred Alternative levels over several years. All annual Preferred Alternative emissions would be below General Conformity *de minimis* levels.

Table 2: Estimated Air Pollutant Emissions Under the Proposed Action, South Coast Air Basin

Parameter	Emissions by Air Pollutant (TPY)				
	CO	NO_X	VOC	PM_{10}	$PM_{2.5}$
No Action Alternative	229	540	285	42	39
Preferred Alternative	252	540	284	42	39
Net Change	**23**	**0**	**-1**	**0**	**0**
De Minimis Threshold	100	10	10	70	100
Exceeds Threshold?	No	No	No	No	No

Notes: Table includes criteria pollutant precursors (e.g., VOC). Individual values may not add exactly to total values due to rounding. CO = carbon monoxide, NO_X = nitrogen oxides, PM_{10} = particulates under 10 microns, $PM_{2.5}$ = particulates under 2.5 microns, TPY = tons per year, VOC = volatile organic compounds

EMISSIONS EVALUATION CONCLUSION

The U.S. Navy concludes that the *de minimis* thresholds for applicable criteria pollutants would not be exceeded by implementation of the Proposed Action. The emissions data supporting that conclusion are shown in Table 2, which summarizes the calculated estimates and *de minimis* limits. Therefore, the U.S. Navy concludes that further formal Conformity Determination procedures are not required, resulting in this record of Non-Applicability.

REFERENCES

John J. McMullen Associates. (2001). Surface Ship Emission Factors Data.

U.S. Environmental Protection Agency. (1995). AP-42, Fifth edition, Compilation of air pollutant emission factors. (Vol. I: Stationary Point and Area Sources).

HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING RONA (August 2013)

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NAVY RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The Proposed Action falls under the Record of Non-Applicability (RONA) category, and is documented with this RONA.

Action Proponents: United States Pacific Fleet
Naval Sea Systems Command
Naval Air Systems Command

Proposed Action: Hawaii-Southern California Training and Testing (HSTT)

Proposed Action Location: Southern California Range Complex, CA

Proposed Action and Emissions Summary:

See attached Conformity Analysis

Affected Air Basin: San Diego Air Basin

Date RONA prepared: June 12, 2013

RONA prepared by: Naval Facilities Engineering Command, Southwest

Attainment Area Status and Emissions Evaluation Conclusion:

To the best of my knowledge and belief, the information contained within this General Conformity Applicability Analysis is correct and accurate. By signing this statement, I am in agreement with the finding that the total of all reasonably foreseeable direct and indirect emissions that will result from this action is below the *de minimis* threshold set forth in 40 Code of Federal Regulations 51.853(b). Accordingly, it is my determination that this action conforms to the applicable State Implementation Plan.

RONA Approval:

Signature: Larry M. Foster

Name/Rank: Larry M. Foster/GS-15 Date: 25 July 2013

Position: Director, Fleet Environmental Readiness Activity: Commander, U.S. Pacific Fleet

Enclosure 2

DO NOT FORWARD TO PERSONS WITHOUT DEMONSTRATED OFFICIAL NEED FOR THE INFORMATION CONTAINED HEREIN

SUBJECT: CONFORMITY ANALYSIS FOR NAVY TRAINING AND TESTING, SAN DIEGO AIR BASIN

INTRODUCTION

The Proposed Action falls under the Record of Non-Applicability (RONA) category pursuant to 40 Code of Federal Regulations (C.F.R.) Parts 52 and 93, and the basis for exemption from conformity requirements is documented with this RONA.

The United States (U.S.) Environmental Protection Agency (USEPA) published *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule*, in the Federal Register (40 C.F.R. Parts 6, 51, and 93) on November 30, 1993. The U.S. Navy published *Clean Air Act General Conformity Guidance* in Chief of Naval Operations Instruction (OPNAVINST) 5090.1C CH-1 (18 July 2011). These publications provide guidance to document Clean Air Act Conformity requirements. Federal regulations state that no department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity that does not conform to an applicable implementation plan. The federal agency that is the action proponent is responsible for determining whether a federal action conforms to the applicable implementation plan before the Proposed Action is taken (40 C.F.R. Part 1, Section 51.850[a]).

Federal actions may be exempt from conformity determinations if they do not exceed designated *de minimis* levels for criteria pollutants as set forth in 40 C.F.R. § 93.153(c) (Table 1). These standards are reflected in Appendix F of OPNAVINST 5090.1C CH-1.

Table 1: *De Minimis* Thresholds for Conformity Determinations

Pollutant	Nonattainment or Maintenance Area Type	*De Minimis* Threshold (TPY)
Ozone (VOC or NO_x)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
$PM_{2.5}$	All nonattainment & maintenance	100
Lead (Pb)	All nonattainment & maintenance	25

Notes: NO_X = nitrogen oxides, Pb = lead, PM_{10} = particulate matter under 10 microns, $PM_{2.5}$ = particulate matter under 2.5 microns, SO_2 = sulfur dioxide, NO_2 = nitrogen dioxide, SO_x = sulfur oxides, TPY = tons per year, VOC = volatile organic compounds

PROPOSED ACTION

Proposed Action Summary

The Proposed Action consists of increases in training and testing activities on the at-sea portions of the Southern California (SOCAL) Range Complex required to address a training shortfall, and to accommodate expected force-structure changes and range enhancements. The assessment of air quality impacts includes all military training activities in the SOCAL Range Complex involving vessels, aircraft, and weapons systems in State of California waters.

Proposed Action Emissions

Aircraft

To estimate aircraft emissions, the operating modes (e.g., "cruise" mode), number of hours of operation, and types of engine for each type of aircraft were evaluated. All aircraft are assumed to travel to and from training ranges at or above 3,000 feet (ft.) (914 meters [m]) above ground level and, therefore, their transits to and from the ranges do not affect surface air quality. Air combat maneuvers and air-to-air missile exercises are primarily conducted at altitudes well in excess of 3,000 ft. (914 m) above ground level and, therefore, are not included in the estimated emissions of criteria air pollutants. Activities or portions of those training or testing activities occurring below 3,000 ft. (914 m) are included in emissions estimates. Examples of activities typically occurring below 3,000 ft. (914 m) include those involving helicopter platforms such as mine warfare, anti-surface warfare, and anti-submarine warfare training and testing activities.

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The emissions calculations for each alternative conservatively assume that each aircraft activity is separately conducted. In practice, a testing activity may be conducted during a training flight. Two or more training activities also may be conducted during one flight (e.g., chaff or flare exercises may occur during electronic warfare operations; or air-to-surface gunnery and air-to-surface bombing activities may occur during a single flight operation). Using conservative assumptions may produce elevated aircraft

emissions estimates, but accounts for the possibility (however remote) that each aircraft training and testing activity is separately conducted.

Vessels

The methods of estimating marine vessel emissions involve evaluating the type of activity, the number of hours of operation, the type of propulsion, and the type of onboard generator for each vessel type. The types of surface ships and numbers of activities for the No Action Alternative are derived from range records and Navy subject matter experts regarding vessel participant data. For the Preferred Alternative, estimates of future ship activities are based on anticipated evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of ships, estimates of future activities are based on the historical distribution of ship use. Navy aircraft carriers and submarines are nuclear-powered, and have no air pollutant emissions associated with propulsion.

For surface ships, the durations of activities were estimated by taking an average over the total number of activities for each type of training and testing. Emissions for baseline activities and for future activities were estimated based on discussions with exercise participants. In addition, information provided by subject-matter experts was used to develop a breakdown of time spent at each operational mode (i.e., power level) used during activities in which marine vessels participated. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of vessel type, power level, and activity duration.

Emission factors for marine vessels were obtained from the database developed for Naval Sea Systems Command by John J. McMullen Associates, Inc. (John J. McMullen Associates 2001). Emission factors were provided for each marine vessel type and power level. The resulting calculations provided information on the time spent at each power level in each part of the Study Area, emission factors for that power level (in pounds of pollutant per hour), and total emissions for each marine vessel for each operational type and mode.

The pollutants for which calculations are made include exhaust total hydrocarbons, CO, NO_x, PM, CO_2, and SO_2. For non-road engines, all particulate matter emissions are assumed to be smaller than PM_{10}, and 92 percent of the particulate matter from gasoline and diesel-fueled engines is assumed to be smaller than $PM_{2.5}$. For gaseous-fueled engines (liquefied petroleum gas/compressed natural gas), 100 percent of the particulate matter emissions are assumed to be smaller than $PM_{2.5}$.

The emissions calculations for each alternative conservatively assume that each vessel activity is separately conducted and separately produces vessel emissions. In practice, one or more testing activities may take advantage of an opportunity to travel at sea aboard and test from a vessel conducting a related or unrelated training activity. It is also probable that two or more training activities may be conducted during one training vessel movement (e.g., a ship may conduct large-, medium-, and small-caliber surface-to-surface gunnery exercises during one vessel movement). Furthermore, multiple unit level training activities may be conducted during a larger composite training unit exercise. Using conservative assumptions may produce elevated vessel emissions estimates, but accounts for the possibility (however remote) that each training or testing activity is separately conducted.

Naval Gunfire, Missiles, Bombs, Other Munitions and Military Expended Material

Naval gunfire, missiles, bombs, and other types of munitions used in training and testing activities emit air pollutants. To estimate the amounts of air pollutants emitted by ordnance during their use, the numbers and types of munitions used during training or testing activities are first totaled. Next, generally accepted emissions factors (AP-42, Compilation of Air Pollutant Emission Factors, Chapter 15: Ordnance Detonation ([U.S. Environmental Protection Agency 1995]) for criteria air pollutants are applied to the

total amounts. Finally, the total amounts of air pollutants emitted by each munition type are summed to produce total amounts of each criteria air pollutant under each alternative.

The estimated annual operational emissions for the No Action Alternative and Preferred Alternative are presented in Table 2. Annual emissions are expected to increase from the No Action Alternative levels to the Preferred Alternative levels over several years. All annual Preferred Alternative emissions would be below General Conformity *de minimis* levels.

Table 2: Estimated Air Pollutant Emissions Under the Proposed Action, San Diego Air Basin

Parameter	Emissions by Air Pollutant (TPY)		
	CO	NO_X	VOC
No Action Alternative	176	546	175
Preferred Alternative	243	592	184
Net Change	**67**	**46**	**9**
De Minimis Threshold	100	100	100
Exceeds Threshold?	No	No	No

Notes: Table includes criteria pollutant precursors (e.g., VOC). Individual values may not add exactly to total values due to rounding. CO = carbon monoxide, NO_X = nitrogen oxides, TPY = tons per year, VOC = volatile organic compounds

EMISSIONS EVALUATION CONCLUSION

The U.S. Navy concludes that the *de minimis* thresholds for applicable criteria pollutants would not be exceeded by implementation of the Proposed Action. The emissions data supporting that conclusion are shown in Table 2, which summarizes the calculated estimates and *de minimis* limits. Therefore, the U.S. Navy concludes that further formal Conformity Determination procedures are not required, resulting in this record of Non-Applicability.

REFERENCES

John J. McMullen Associates. (2001). Surface Ship Emission Factors Data.

U.S. Environmental Protection Agency. (1995). AP-42, Fifth edition, Compilation of air pollutant emission factors. (Vol. I: Stationary Point and Area Sources).

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Office of National Marine Sanctuaries
1305 East-West Highway
Silver Spring, Maryland 20910

August 16, 2013

Mr. Alexander Stone
Naval Facilities Engineering Command, Southwest/EV21.CS
1220 Pacific Highway
San Diego, CA 92132-5190

Dear Mr. Stone:

NOAA's Office of National Marine Sanctuaries (ONMS) has submitted written comments and participated in direct dialogue with Navy staff on several versions of the Hawaii-Southern California Fleet Testing and Training (HSTT) Environmental Impact Statement (EIS). ONMS values the significant enhancements to the information the Navy has provided on the potential effects of its proposed activities on sanctuary and monument resources and on its alternatives as described in the EIS. ONMS finds the final version of the HSTT EIS is sufficient for the purposes of a sanctuary resource statement.

Section 6 of the EIS states that the Navy does not propose new, modified, or an increased frequency of activities in Channel Islands and Hawaiian Islands Humpback Whale national marine sanctuaries or activities that are different from those currently conducted in these areas. Additionally, the Navy does not propose new activities in the Papahānaumokuākea Marine National Monument, or activities that are different from those currently conducted in this area. Further, the EIS states that increases to military activities described in the proposed action would not occur in the monument. Section 5 of the EIS further details mitigation and monitoring activities that will accompany proposed actions that would occur within sanctuary and monument boundaries.

ONMS finds that the NMSA does not require sanctuary consultation pursuant to section 304(d) at this time. Should the Navy change or modify any of its proposed activities (including associated mitigation and monitoring programs), the Navy should contact ONMS to determine whether consultation has been triggered as a result of the changes or modifications.

Thank you for the opportunity to work with you and your staff to meet the Navy's mission objectives and to protect the resources of ONMS.

Sincerely,

FOR Daniel J. Basta
Director
Office of National Marine Sanctuaries

Cc: Karen Foskey, Office of the Chief of Naval Operations (CNO-N45)
James Landis, Office of the Assistant Secretary of the Navy (EI&E)

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Appendix D: Air Quality Example Emissions Calculations and Example Record of Non-Applicability

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APPENDIX D AIR QUALITY EXAMPLE EMISSIONS CALCULATIONS AND EXAMPLE RONA

This appendix discusses emission factor development, calculations, and assumptions used in the air quality analyses presented in the Air Quality section of Chapter 3 (see Section 3.2).

D.1 SURFACE OPERATIONS EMISSIONS

Surface operations are activities associated with vessel movements. Fleet training activities use a variety of marine vessels, including cruisers, destroyers, frigates, carriers, submarines, amphibious vessels, and small boats. Testing activities use a variety of marine vessels, including various testing support vessels, work boats, torpedo recovery vessels, unmanned surface vehicles, and small boats. These vessels use a variety of propulsion methods, including marine outboard engines, diesel engines, and gas turbines.

Marine Outboard Engines:

The United States (U.S.) Environmental Protection Agency (USEPA) has published emissions factors for air pollutants produced by several types of two-stroke and four-stroke outboard engines. The most conservative emission factors for two-stroke engines of various horsepower are presented in Table D.1-1.

Table D.1-1: Emission Factors for Two Stroke Engines

USEPA Outboard Engine Emissions Factors (grams/hp-hr.)			
NO_x	CO	VOC	SO_x
0.018	0.63	0.25	0.00108

Notes: USEPA = United States Environmental Protection Agency, hp = horsepower, hr. = hour; NO_x = nitrogen oxides, CO = carbon monoxide, VOC = volatile organic compounds, SO_x = sulfur oxides

Source: USEPA, 1999, Exhaust Emissions Factors for Non-Road Engine Modeling-Spark Ignition. Report No. NR-010b; Office of Mobile Sources, Assessment and Modeling Division, EPA-R-99-009

Emissions for surface craft using outboard engines were calculated using USEPA AP-42 factors, and multiplied by the engine horsepower and hours of operation.

$$Emissions = HP \times HR/YR \times EF \times ENG$$

Where:

Emissions = surface craft emissions
HP = horsepower (reflective of a particular load factor/engine power setting)
HR/YR = hours per year
EF = emission factor for specific engine type
ENG = number of engines

To obtain the total criteria pollutant emissions for the Proposed Action, emissions were calculated for each training or testing activity, type of surface vessel, and criteria pollutant. These individual estimates of emissions, in units of tons per year, were then summed by criteria pollutant to obtain the aggregate emissions for surface vessel emissions activities.

Diesel Engines:

Limited data were available for large marine diesel engines. Therefore, USEPA AP-42 emissions factors for industrial reciprocating engines were used to calculate diesel engine emissions. Other sources of vessel emissions factors were previous U.S. Department of the Navy (Navy) Environmental Impact Statement (EIS)/Overseas EIS (OEIS) documents (citing JJMA 2001). Diesel was assumed to be the primary fuel to ensure a conservative estimate. Calculation methods similar to those described for Marine Outboard Engines were used to obtain emissions estimates for diesel engines.

$$Emissions = HP \times HR/YR \times EF \times ENG$$

Where:

Emissions = surface craft emissions
HP = horsepower (reflective of a particular load factor/engine power setting)
HR/YR = hours per year
EF = emission factor for specific engine type
ENG = number of engines

Diesel engine emission factors were multiplied by the engine horsepower and annual hours of operation to calculate the pollutant emissions per year.

D.2 AIR OPERATIONS EMISSIONS

Fleet training and Naval Air Systems Command testing consists of the activities of various aircraft, including the F/A-18, P-3, SH-60B, MH-53, MH-60S, and Lear jet. RDT&E air operations consist of the activities of various aircraft, including the 1UH-1N, SH-60B, MH-53, MH-60S, and Cessna-172. Aircraft operations of concern are those that occur from ground level up to 3,000 feet (ft.) (914 meters [m]) above ground level (AGL). The 3,000 ft. (914 m) AGL ceiling was assumed to be the atmospheric mixing height above which any pollutant generated would not contribute to increased pollutant concentrations at ground level (known as the mixing zone). All criteria pollutant emissions from aircraft generated above 3,000 ft. (914 m) AGL are excluded from analysis of compliance with National Ambient Air Quality Standards. The pollutant emission rate is a function of the aircraft engine's fuel flow rate and efficiency. Emissions for one complete training activity for a particular aircraft are calculated by knowing the specific engine pollutant emission factors for each mode of operation.

For this EIS/OEIS, emission factors for most military engines were obtained from Navy's Aircraft Environmental Support Office (AESO) memoranda and previous Navy EIS/OEIS documentation (primarily citing the Federal Aviation Administration's EDMS model). For those aircraft for which engine data were unavailable, an applicable surrogate was used. Table D-2 is an example of emission factors for the aircraft engines. The table lists the various engine power modes, time in each mode, fuel flow, and corresponding pollutant emission factors. Using these data, as well as information on activity levels (i.e., number of sorties), pollutant emissions for each aircraft/organization were calculated by applying the equation below.

$$Emissions = TIM \times FF \times EF \times ENG \times CF$$

Where:

Emissions = aircraft emissions (pounds [lb.]) (for EF in lb./1,000 gallons [gal.] fuel)
TIM = time-in-mode at a specified power setting (hours [hr.]/operation).

FF = fuel flow at a specified power setting (gal./hr./engine)
EF = emission factor for specific engine type and power setting (lb./1,000 gal. of fuel used)
ENG = number of engines on aircraft
CF = conversion factor (0.001)

D.3 ORDNANCE AND MUNITIONS EMISSIONS

Available emissions factors (AP-42, *Compilation of Air Pollutant Emission Factors*) were used. These factors were then multiplied by the net weight of the explosive and the number of items that were used per year. This calculation provides estimates of annual emissions.

$$Emissions = EXP/YR \times EF \times Net\ Wt$$

Where:

Emissions = ordnance emissions
EXP/YR = explosives, propellants, and pyrotechnics used per year
EF = emissions factor
Net Wt = net weight of explosive

D.4 EMISSIONS ESTIMATES SPREADSHEETS

The following spreadsheets are examples of the emissions calculations for aircraft, vessels, and munitions. The examples provided for aircraft are for baseline training within the Southern California Range Complex. These examples are representative of calculation spreadsheets developed for each range complex or testing area. They are also representative of calculation spreadsheets developed for testing events. Moreover, they are representative of the calculations developed for each alternative analyzed in this EIS/OEIS. The example ordnance emissions calculation is for baseline ordnance emissions. The full set of calculation spreadsheets is available on the Hawaii-Southern California Training and Testing (HSTT) EIS project website.

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Table D.4-1: Sample Air Emissions Calculations Table (Training Ops Information – Sample only)

Training - Aircraft Air Emissions—No-Action Alternative

			TRAINING OPS INFORMATION - AIRCRAFT												Training Platform Information		
				Aircraft		Time		Altitude		Distribution (%)			Distribution (hr)					
Training or Testing Event	Location	Annual Operations (#)	Distribution	A/C Sorties (#)	Type	Ave Time on Range (hr)	Total Time on Range (hr)	Time < 3,000 ft (%)	Time < 3,000 ft (hr)	0-3 nm from shore	3-12 nm from Shore	>12 nm from Shore	Total Time 0-3 nm from shore	Total Time 3-12 nm from shore	Total Time >12 nm from shore	Engine Model	Engines (#)	Fuel Flow (lb/hr)
Anti-Air Warfare																		
Air Combat Maneuver	SOCAL	0	1.75	4060	FA-18E/F	1.0	4060.0	0%	0.0	4%	11%	85%	0.00	0.00	0.00	F414-GE-40	2	4049
	Hawaii	2320	0.25	580	AV-8B	1.0	580.0	0%	0.0	4%	11%	85%	0.00	0.00	0.00	F402-RR-40	1	5785
	Transit	385																
	Total	2705																
Air Defense Exercise	SOCAL	0	0.14	83	E-2	1.0	83.3	50%	41.7	0%	0%	100%	0.00	0.00	41.65	T56-A-425 (	2	1100
	Hawaii	595	0.86	512	FA-18E/F	1.0	511.7	50%	255.9	0%	0%	100%	0.00	0.00	255.85	F414-GE-40	2	4049
	Transit	21																
	Total	616																
Gunnery Exercise, Air-to-Air (Medium Caliber)	SOCAL	0	1.75	53	FA-18E/F	1.0	52.5	0%	0.0	4%	11%	85%	0.00	0.00	0.00	F414-GE-40	2	4049
	Hawaii	30	0.25	8	AV-8B	1.0	7.5	0%	0.0	4%	11%	85%	0.00	0.00	0.00	F402-RR-40	1	5785
	Transit	10																
	Total	40																
Missile Exercise, Air-to-Air	SOCAL	0	0.33	53	FA-18A/C	2.0	105.6	0%	0.0	0%	0%	100%	0.00	0.00	0.00	F404-GE-40	2	3318
	Hawaii	160	0.5	80	FA-18E/F	2.0	160.0	0%	0.0	0%	0%	100%	0.00	0.00	0.00	F414-GE-40	2	4049
	Transit	20	0.09	14	E-2C	4.0	57.6	0%	0.0	0%	0%	100%	0.00	0.00	0.00	T56-A-425 (	2	1100
	Total	180																
Gunnery Exercise, Surface-to-Air (Large	SOCAL	0	0.58	10	Learjet	3.0	31.3	50%	15.7	0%	0%	100%	0.00	0.00	15.66	TFE 731-2-2	2	532
	Hawaii	18																
	Transit	0																
	Total	18																
Missile Exercise, Surface-to-Air	SOCAL	0	0.33	8	SH-60B	3.0	23.8	100%	23.8	0%	0%	100%	0.00	0.00	23.76	T700-GE-40	2	600
	Hawaii	24	0.33	8	P-3	3.0	23.8	67%	15.8	0%	0%	100%	0.00	0.00	15.85	T56-A-14 (a	4	1500
	Transit	8	0.33	8	Learjet	3.0	23.8	67%	15.8	0%	0%	100%	0.00	0.00	15.85	TFE 731-2-2	2	531.76
	Total	32																

Table D.4-2: Sample Air Emissions Calculations Table (Emissions Factors – Sample only)

Training - Aircraft Air Emissions—No-Action Alternative											
			EMISSIONS FACTORS								
			Emission Indices, lb/1,000 lb fuel					Emissions Factors (lb/hr)			
Training or Testing	Location	Annual Operations	CO	NOx	VOC	SOx	PM	CO	NOx	VOC	SOx	PM
Anti-Air Warfare												
Air Combat Maneuver	SOCAL	0	0.89	11.58	0.12	0.40	6.31	7.21	93.77	0.97	3.24	51.10
	Hawaii	2320	7.70	8.60	0.54	0.40	3.80	44.54	49.75	3.12	2.31	21.98
	Transit	385										
	Total	2705										
Air Defense Exercise	SOCAL	0	2.16	8.06	0.49	0.40	3.97	4.75	17.73	1.08	0.88	8.73
	Hawaii	595	0.89	11.58	0.12	0.40	6.31	7.21	93.77	0.97	3.24	51.10
	Transit	21										
	Total	616										
Gunnery Exercise, Air-to-Air (Medium Caliber)	SOCAL	0	0.89	11.58	0.12	0.40	6.31	7.21	93.77	0.97	3.24	51.10
	Hawaii	30	7.70	8.60	0.54	0.40	3.80	44.54	49.75	3.12	2.31	21.98
	Transit	10										
	Total	40										
Missile Exercise, Air-to-Air	SOCAL	0	2.44	6.74	0.44	0.40	6.36	16.19	44.73	2.92	2.65	42.20
	Hawaii	160	0.89	11.58	0.12	0.40	6.31	7.21	93.77	0.97	3.24	51.10
	Transit	20	2.16	8.06	0.49	0.40	3.97	4.75	17.73	1.08	0.88	8.73
	Total	180										
Gunnery Exercise, Surface-to-Air (Large	SOCAL	0	22.38	5.90	4.28	0.54	4.20	23.80	6.27	4.55	0.57	4.47
	Hawaii	18										
	Transit	0										
	Total	18										
Missile Exercise, Surface-to-Air	SOCAL	0	6.25	6.40	0.55	0.40	4.20	7.50	7.68	0.66	0.48	5.04
	Hawaii	24	1.82	8.43	0.41	0.40	3.97	10.92	50.58	2.46	2.40	23.82
	Transit	8	22.38	5.90	4.28	0.54	4.20	23.80	6.27	4.55	0.57	4.47
	Total	32										

Table D.4-3: Sample Air Emissions Calculations Table (Emissions – Sample only)

Training or Testing	Location	Annual Operations	Training - Aircraft Air Emissions—No-Action Alternative																			
			EMISSIONS (lb/yr)																			
			State (0-3 nm)					U.S. (3-12 nm)					International (>12 nm)					Annual Fuel Use		GHG Emissions (lb)			
			CO	NOx	VOC	SOx	PM	CO	NOx	VOC	SOx	PM	CO	NOx	VOC	SOx	PM	Pounds	Gallons	CO_2	N_2O	CH_4	CO_{2-e}
Anti-Air Warfare																							
Air Combat Maneuver	SOCAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,438,940	2,417,491	50,897,859	1,651	1,438	51,439,921
	Hawaii	2320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,355,300	493,426	10,388,601	337	294	10,499,239
	Transit	385																					
	Total	2705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19,794,240	2,910,918	61,286,460	1,988	1,732	61,939,161
Air Defense Exercise	SOCAL	0	0	0	0	0	0	0	0	0	0	0	198	739	45	37	364	91,630	13,475	283,703	9	8	286,724
	Hawaii	595	0	0	0	0	0	0	0	0	0	0	1844	23992	249	829	13074	2,071,873	304,687	6,414,885	208	181	6,483,204
	Transit	21																					
	Total	616	0	0	0	0	0	0	0	0	0	0	2,042	24,731	294	865	13,437	2,163,503	318,162	6,698,588	217	189	6,769,928
Gunnery Exercise, Air-to-Air (Medium Caliber)	SOCAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212,573	31,261	658,162	21	19	665,171
	Hawaii	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43,388	6,381	134,335	4	4	135,766
	Transit	10																					
	Total	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255,960	37,641	792,497	26	22	800,937
Missile Exercise, Air-to-Air	SOCAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350,381	51,527	1,084,841	35	31	1,096,394
	Hawaii	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	647,840	95,271	2,005,827	65	57	2,027,189
	Transit	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63,360	9,318	196,174	6	6	198,263
	Total	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,061,581	156,115	3,286,841	107	93	3,321,846
Gunnery Exercise, Surface-to-Air (Large	SOCAL	0	0	0	0	0	0	0	0	0	0	0	373	98	71	9	70	16,655	2,449	51,566	2	1	52,115
	Hawaii	18																					
	Transit	0																					
	Total	18	0	0	0	0	0	0	0	0	0	0	373	98	71	9	70	16,655	2,449	51,566	2	1	52,115
Missile Exercise, Surface-to-Air	SOCAL	0	0	0	0	0	0	0	0	0	0	0	178	182	16	11	120	14256	2096	44139	1	1	44,609
	Hawaii	24	0	0	0	0	0	0	0	0	0	0	173	802	39	38	377	35640	5241	110348	4	3	111,523
	Transit	8	0	0	0	0	0	0	0	0	0	0	377	99	72	9	71	12635	1858	39119	1	1	39,536
	Total	32	0	0	0	0	0	0	0	0	0	0	728	1,084	127	59	568	62,531	9,196	193,606	6	5	195,668

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D.5 DRAFT RECORD OF NON-APPLICABILITY

This appendix provides a Record of Non-Applicability (RONA) Memorandum (Figure D.5-1) and draft Records of Non-Applicability and Conformity Analyses (Figures D.5-2 through D.5-5) for each California Air Basin potentially impacted by the Proposed Action (South Coast Air Basin and San Diego Air Basin).

MEMORANDUM FOR THE RECORD

From: _____

Subj: Applicability Analyses for Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement – Operations in State of California Waters

Ref: (a) 40 C.F.R., 51.853(b)

Encl: (1) Record of Non-Applicability (RONA) for Hawaii-Southern Training and Testing in State of California Waters, South Coast Air Basin; and

(2) Record of Non-Applicability (RONA) for Hawaii-Southern Training and Testing in State of California Waters, San Diego Air Basin.

1. Enclosure (1) is a RONA for those Pacific Fleet training and testing activities that are expected to occur annually in State of California waters in South Coast Air Basin (SCAB). The Preferred Alternative (Alternative 2) emissions of carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and particulates under 10 microns (PM_{10}) and under 2.5 microns ($PM_{2.5}$), in SCAB are provided in Enclosure 1. A comparison of the relevant criteria air pollutant emissions of the Proposed Action with Reference (a) shows that the anticipated emissions are *de minimis*.

2. Enclosure (2) is a RONA for those Pacific Fleet training and testing activities that are expected to occur annually in State of California waters in San Diego Air Basin (SDAB). The Preferred Alternative (Alternative 2) emissions of CO, NO_x, and VOC in SDAB are provided in Enclosure 2. A comparison of the relevant criteria air pollutant emissions of the Proposed Action with Reference (a) shows that the anticipated emissions are *de minimis*.

2. If there are any questions or if additional information is needed, please call _____ at _____.

_____

Name

Title

Figure D.5-1: Record of Non-Applicability Memorandum

NAVY RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The Proposed Action falls under the Record of Non-Applicability (RONA) category, and is documented with this RONA.

Action Proponents: United States Pacific Fleet
Naval Sea Systems Command
Naval Air Systems Command

Proposed Action: Hawaii-Southern California Training and Testing (HSTT)

Proposed Action Location: Southern California Range Complex, CA

Proposed Action and Emissions Summary:

See attached Conformity Analysis

Affected Air Basin: South Coast Air Basin

Date RONA prepared: _____

RONA prepared by: Naval Facilities Engineering Command, Southwest

Attainment Area Status and Emissions Evaluation Conclusion:

To the best of my knowledge and belief, the information contained within this General Conformity Applicability Analysis is correct and accurate. By signing this statement, I am in agreement with the finding that the total of all reasonably foreseeable direct and indirect emissions that will result from this action is below the *de minimis* threshold set forth in 40 C.F.R. 51.853(b). Accordingly, it is my determination that this action conforms to the applicable State Implementation Plan (SIP).

RONA Approval:

Signature: _____

Name/Rank: _____ Date: _____

Position: _____Commanding Officer: _____ Activity: _____

Enclosure 1

Figure D.5-2: Record of Non-Applicability Form, South Coast Air Basin

Subject: Conformity Analysis for Navy Training and Testing, South Coast Air Basin

INTRODUCTION

The Proposed Action falls under the Record of Non-Applicability (RONA) category pursuant to 40 Code of Federal Regulations (CFR) Parts 52 and 93, and the basis for exemption from conformity requirements is documented with this RONA.

The United States (U.S.) Environmental Protection Agency (USEPA) published *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule*, in the Federal Register (40 CFR Parts 6, 51, and 93) on November 30, 1993. The U.S. Navy published *Clean Air Act General Conformity Guidance* in Chief of Naval Operations Instruction (OPNAVINST) 5090.1C CH-1 (18 July 2011). These publications provide guidance to document Clean Air Act Conformity requirements. Federal regulations state that no department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity that does not conform to an applicable implementation plan. The federal agency that is the action proponent is responsible for determining whether a federal action conforms to the applicable implementation plan before the Proposed Action is taken (40 CFR Part 1, Section 51.850[a]).

Federal actions may be exempt from conformity determinations if they do not exceed designated *de minimis* levels for criteria pollutants as set forth in 40 CFR § 93.153(c) (Table 1). These standards are reflected in Appendix F of OPNAVINST 5090.1C CH-1.

Table 1: *De Minimis* Thresholds for Conformity Determinations

Pollutant	Nonattainment or Maintenance Area Type	*De Minimis* Threshold (TPY)
Ozone (VOC or NO_x)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
$PM_{2.5}$	All nonattainment & maintenance	100
Lead (Pb)	All nonattainment & maintenance	25

Notes: NO_X = nitrogen oxides; Pb = lead; PM_{10} = particulate matter under 10 microns; SO_x = sulfur oxides; TPY = tons per year; VOC = volatile organic compounds

Figure D.5-3: Conformity Analysis, South Coast Air Basin

PROPOSED ACTION

Proposed Action Summary

The Proposed Action consists of increases in training and testing activities on the at-sea portions of the Southern California (SOCAL) Range Complex required to address a training shortfall, and to accommodate expected force-structure changes and range enhancements. The assessment of air quality impacts includes all military training activities in the SOCAL Range Complex involving vessels, aircraft, and weapons systems in State of California waters.

Proposed Action Emissions

Aircraft

To estimate aircraft emissions, the operating modes (e.g., "cruise" mode), number of hours of operation, and types of engine for each type of aircraft were evaluated. All aircraft are assumed to travel to and from training ranges at or above 3,000 ft. (914 m) above ground level and, therefore, their transits to and from the ranges do not affect surface air quality. Air combat maneuvers and air-to-air missile exercises are primarily conducted at altitudes well in excess of 3,000 ft. (914 m) above ground level and, therefore, are not included in the estimated emissions of criteria air pollutants. Activities or portions of those training or testing activities occurring below 3,000 ft. (914 m) are included in emissions estimates. Examples of activities typically occurring below 3,000 ft. (914 m) include those involving helicopter platforms such as mine warfare, anti-surface warfare, and anti-submarine warfare training and testing activities.

The types of aircraft used and the numbers of flights flown under the No Action Alternative are derived from historical data. The types of aircraft identified include the typical aircraft platforms that conduct a particular training or testing exercise (or the closest surrogate when information is not available), including range support aircraft (e.g., non-Navy commercial air services). For the Preferred Alternative, estimates of future aircraft sorties are based on evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of aircraft, future activity levels are estimated from the distribution of baseline activities.

Time on range (activity duration) under the No Action Alternative was calculated from average times derived from range records and Navy subject matter experts. To estimate time on range for each aircraft activity under the Preferred Alternative, the average flight duration approximated in the baseline data was used in the calculations. Estimated altitudes of activities for all aircraft were obtained from aircrew members in operational squadrons. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of aircraft type, altitude, and flight duration. Where aircraft testing activities were dissimilar to training activities, assumptions for time on range were derived from Navy subject matter experts.

Air pollutant emissions were estimated based on the Navy's Aircraft Environmental Support Office Memorandum Reports for individual aircraft categories (Aircraft Emission Estimates: Mission Operations). For aircraft for which Aircraft Environmental Support Office emission factors were not available, emission factors were obtained from other published sources.

Figure D.5-3: Conformity Analysis, South Coast Air Basin (continued)

The emissions calculations for each alternative conservatively assume that each aircraft activity is separately conducted. In practice, a testing activity may be conducted during a training flight. Two or more training activities also may be conducted during one flight (e.g., chaff or flare exercises may occur during electronic warfare operations; or air-to-surface gunnery and air-to-surface bombing activities may occur during a single flight operation). Using conservative assumptions may produce elevated aircraft emissions estimates, but accounts for the possibility (however remote) that each aircraft training and testing activity is separately conducted.

Vessels

The methods of estimating marine vessel emissions involve evaluating the type of activity, the number of hours of operation, the type of propulsion, and the type of onboard generator for each vessel type. The types of surface ships and numbers of activities for the No Action Alternative are derived from range records and Navy subject matter experts regarding vessel participant data. For the Preferred Alternative, estimates of future ship activities are based on anticipated evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of ships, estimates of future activities are based on the historical distribution of ship use. Navy aircraft carriers and submarines are nuclear-powered, and have no air pollutant emissions associated with propulsion.

For surface ships, the durations of activities were estimated by taking an average over the total number of activities for each type of training and testing. Emissions for baseline activities and for future activities were estimated based on discussions with exercise participants. In addition, information provided by subject-matter experts was used to develop a breakdown of time spent at each operational mode (i.e., power level) used during activities in which marine vessels participated. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of vessel type, power level, and activity duration.

Emission factors for marine vessels were obtained from the database developed for Naval Sea Systems Command by John J. McMullen Associates, Inc. (John J. McMullen Associates 2001). Emission factors were provided for each marine vessel type and power level. The resulting calculations provided information on the time spent at each power level in each part of the Study Area, emission factors for that power level (in pounds of pollutant per hour), and total emissions for each marine vessel for each operational type and mode.

The pollutants for which calculations are made include exhaust total hydrocarbons, CO, NO_x, PM, CO_2, and SO_2. For non-road engines, all particulate matter emissions are assumed to be smaller than PM_{10}, and 92 percent of the particulate matter from gasoline and diesel-fueled engines is assumed to be smaller than $PM_{2.5}$. For gaseous-fueled engines (liquefied petroleum gas/compressed natural gas), 100 percent of the particulate matter emissions are assumed to be smaller than $PM_{2.5}$.

The emissions calculations for each alternative conservatively assume that each vessel activity is separately conducted and separately produces vessel emissions. In practice, one or more testing activities may take advantage of an opportunity to travel at sea aboard and test from a vessel conducting a related or unrelated training activity. It is also probable that two or more training activities may be conducted during one training vessel movement (e.g., a ship may conduct large-, medium-, and small-caliber surface-to-surface gunnery exercises during one vessel movement). Furthermore, multiple unit level training activities may be conducted during a larger composite training unit exercise. Using conservative assumptions may produce elevated vessel emissions estimates, but accounts for the possibility (however remote) that each training or testing activity is separately conducted.

Figure D.5-3: Conformity Analysis, South Coast Air Basin (continued)

Naval Gunfire, Missiles, Bombs, Other Munitions and Military Expended Material

Naval gunfire, missiles, bombs, and other types of munitions used in training and testing activities emit air pollutants. To estimate the amounts of air pollutants emitted by ordnance during their use, the numbers and types of munitions used during training or testing activities are first totaled. Then generally accepted emissions factors (AP-42, Compilation of Air Pollutant Emission Factors, Chapter 15: Ordnance Detonation [USEPA 1995]) for criteria air pollutants are applied to the total amounts. Finally, the total amounts of air pollutants emitted by each munition type are summed to produce total amounts of each criteria air pollutant under each alternative.

The estimated annual operational emissions for the No Action Alternative and Preferred Alternative are presented in Table 2. Annual emissions are expected to increase from the No Action Alternative levels to the Preferred Alternative levels over several years. All annual Preferred Alternative emissions would be below General Conformity *de minimis* levels.

Table 2: Estimated Air Pollutant Emissions Under the Proposed Action

Parameter	Emissions by Air Pollutant (TPY)				
	CO	NO_X	VOC	PM_{10}	$PM_{2.5}$
No Action Alternative	229	540	285	42	39
Preferred Alternative	252	540	284	42	39
Net Change	**23**	**0**	**-1**	**0**	**0**
De Minimis Threshold	100	10	10	70	100
Exceeds Threshold?	No	No	No	No	No

Notes: Table includes criteria pollutant precursors (e.g., VOC). Individual values may not add exactly to total values due to rounding. CO = carbon monoxide; NO_X = nitrogen oxides; PM_{10} = particulates under 10 microns; $PM_{2.5}$ = particulates under 2.5 microns; TPY = tons per year; VOC = volatile organic compounds

EMISSIONS EVALUATION CONCLUSION

The U.S. Navy concludes that the *de minimis* thresholds for applicable criteria pollutants would not be exceeded by implementation of the Proposed Action. The emissions data supporting that conclusion are shown in Table 2, which summarizes the calculated estimates and *de minimis* limits. Therefore, the U.S. Navy concludes that further formal Conformity Determination procedures are not required, resulting in this record of Non-Applicability.

Figure D.5-3: Conformity Analysis, South Coast Air Basin (continued)

NAVY RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

The Proposed Action falls under the Record of Non-Applicability (RONA) category, and is documented with this RONA.

Action Proponents: United States Pacific Fleet
Naval Sea Systems Command
Naval Air Systems Command

Proposed Action: Hawaii-Southern California Training and Testing (HSTT)

Proposed Action Location: Southern California Range Complex, CA

Proposed Action and Emissions Summary:

See attached Conformity Analysis

Affected Air Basin: San Diego Air Basin

Date RONA prepared: _____

RONA prepared by: Naval Facilities Engineering Command, Southwest

Attainment Area Status and Emissions Evaluation Conclusion:

To the best of my knowledge and belief, the information contained within this General Conformity Applicability Analysis is correct and accurate. By signing this statement, I am in agreement with the finding that the total of all reasonably foreseeable direct and indirect emissions that will result from this action is below the *de minimis* threshold set forth in 40 C.F.R. 51.853(b). Accordingly, it is my determination that this action conforms to the applicable State Implementation Plan (SIP).

RONA Approval:

Signature: _____

Name/Rank: _____ Date: _____

Position: _____Commanding Officer: _____ Activity: _____

Enclosure 2

Figure D.5-4: Record of Non-Applicability Form, San Diego Air Basin

Subject: Conformity Analysis for Navy Training and Testing, San Diego Air Basin

INTRODUCTION

The Proposed Action falls under the Record of Non-Applicability (RONA) category pursuant to 40 Code of Federal Regulations (CFR) Parts 52 and 93, and the basis for exemption from conformity requirements is documented with this RONA.

The United States (U.S.) Environmental Protection Agency (USEPA) published *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule*, in the Federal Register (40 CFR Parts 6, 51, and 93) on November 30, 1993. The U.S. Navy published *Clean Air Act General Conformity Guidance* in Chief of Naval Operations Instruction (OPNAVINST) 5090.1C CH-1 (18 July 2011). These publications provide guidance to document Clean Air Act Conformity requirements. Federal regulations state that no department, agency, or instrumentality of the federal government shall engage in, support in any way, or provide financial assistance for, license or permit, or approve any activity that does not conform to an applicable implementation plan. The federal agency that is the action proponent is responsible for determining whether a federal action conforms to the applicable implementation plan before the Proposed Action is taken (40 CFR Part 1, Section 51.850[a]).

Federal actions may be exempt from conformity determinations if they do not exceed designated *de minimis* levels for criteria pollutants as set forth in 40 CFR § 93.153(c) (Table 1). These standards are reflected in Appendix F of OPNAVINST 5090.1C CH-1.

Table 1: *De Minimis* Thresholds for Conformity Determinations

Pollutant	Nonattainment or Maintenance Area Type	*De Minimis* Threshold (TPY)
Ozone (VOC or NO_x)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment & maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
$PM_{2.5}$	All nonattainment & maintenance	100
Lead (Pb)	All nonattainment & maintenance	25

Notes: NO_X = nitrogen oxides; Pb = lead; PM_{10} = particulate matter under 10 microns; SO_x = sulfur oxides; TPY = tons per year; VOC = volatile organic compounds

Figure D.5-5: Conformity Analysis, San Diego Air Basin

PROPOSED ACTION

Proposed Action Summary

The Proposed Action consists of increases in training and testing activities on the at-sea portions of the Southern California (SOCAL) Range Complex required to address a training shortfall, and to accommodate expected force-structure changes and range enhancements. The assessment of air quality impacts includes all military training activities in the SOCAL Range Complex involving vessels, aircraft, and weapons systems in State of California waters.

Proposed Action Emissions

Aircraft

To estimate aircraft emissions, the operating modes (e.g., "cruise" mode), number of hours of operation, and types of engine for each type of aircraft were evaluated. All aircraft are assumed to travel to and from training ranges at or above 3,000 ft. (914 m) above ground level and, therefore, their transits to and from the ranges do not affect surface air quality. Air combat maneuvers and air-to-air missile exercises are primarily conducted at altitudes well in excess of 3,000 ft. (914 m) above ground level and, therefore, are not included in the estimated emissions of criteria air pollutants. Activities or portions of those training or testing activities occurring below 3,000 ft. (914 m) are included in emissions estimates. Examples of activities typically occurring below 3,000 ft. (914 m) include those involving helicopter platforms such as mine warfare, anti-surface warfare, and anti-submarine warfare training and testing activities.

The types of aircraft used and the numbers of flights flown under the No Action Alternative are derived from historical data. The types of aircraft identified include the typical aircraft platforms that conduct a particular training or testing exercise (or the closest surrogate when information is not available), including range support aircraft (e.g., non-Navy commercial air services). For the Preferred Alternative, estimates of future aircraft sorties are based on evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of aircraft, future activity levels are estimated from the distribution of baseline activities.

Time on range (activity duration) under the No Action Alternative was calculated from average times derived from range records and Navy subject matter experts. To estimate time on range for each aircraft activity under the Preferred Alternative, the average flight duration approximated in the baseline data was used in the calculations. Estimated altitudes of activities for all aircraft were obtained from aircrew members in operational squadrons. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of aircraft type, altitude, and flight duration. Where aircraft testing activities were dissimilar to training activities, assumptions for time on range were derived from Navy subject matter experts.

Air pollutant emissions were estimated based on the Navy's Aircraft Environmental Support Office Memorandum Reports for individual aircraft categories (Aircraft Emission Estimates: Mission Operations). For aircraft for which Aircraft Environmental Support Office emission factors were not available, emission factors were obtained from other published sources.

Figure D.5-5: Conformity Analysis, San Diego Air Basin (continued)

The emissions calculations for each alternative conservatively assume that each aircraft activity is separately conducted. In practice, a testing activity may be conducted during a training flight. Two or more training activities also may be conducted during one flight (e.g., chaff or flare exercises may occur during electronic warfare operations; or air-to-surface gunnery and air-to-surface bombing activities may occur during a single flight operation). Using conservative assumptions may produce elevated aircraft emissions estimates, but accounts for the possibility (however remote) that each aircraft training and testing activity is separately conducted.

Vessels

The methods of estimating marine vessel emissions involve evaluating the type of activity, the number of hours of operation, the type of propulsion, and the type of onboard generator for each vessel type. The types of surface ships and numbers of activities for the No Action Alternative are derived from range records and Navy subject matter experts regarding vessel participant data. For the Preferred Alternative, estimates of future ship activities are based on anticipated evolutionary changes in the Navy's force structure and mission assignments. Where there are no major changes in types of ships, estimates of future activities are based on the historical distribution of ship use. Navy aircraft carriers and submarines are nuclear-powered, and have no air pollutant emissions associated with propulsion.

For surface ships, the durations of activities were estimated by taking an average over the total number of activities for each type of training and testing. Emissions for baseline activities and for future activities were estimated based on discussions with exercise participants. In addition, information provided by subject-matter experts was used to develop a breakdown of time spent at each operational mode (i.e., power level) used during activities in which marine vessels participated. Several testing activities are similar to training activities, and therefore similar assumptions were made for such activities in terms of vessel type, power level, and activity duration.

Emission factors for marine vessels were obtained from the database developed for Naval Sea Systems Command by John J. McMullen Associates, Inc. (John J. McMullen Associates 2001). Emission factors were provided for each marine vessel type and power level. The resulting calculations provided information on the time spent at each power level in each part of the Study Area, emission factors for that power level (in pounds of pollutant per hour), and total emissions for each marine vessel for each operational type and mode.

The pollutants for which calculations are made include exhaust total hydrocarbons, CO, NO_x, PM, CO_2, and SO_2. For non-road engines, all particulate matter emissions are assumed to be smaller than PM_{10}, and 92 percent of the particulate matter from gasoline and diesel-fueled engines is assumed to be smaller than $PM_{2.5}$. For gaseous-fueled engines (liquefied petroleum gas/compressed natural gas), 100 percent of the particulate matter emissions are assumed to be smaller than $PM_{2.5}$.

The emissions calculations for each alternative conservatively assume that each vessel activity is separately conducted and separately produces vessel emissions. In practice, one or more testing activities may take advantage of an opportunity to travel at sea aboard and test from a vessel conducting a related or unrelated training activity. It is also probable that two or more training activities may be conducted during one training vessel movement (e.g., a ship may conduct large-, medium-, and small-caliber surface-to-surface gunnery exercises during one vessel movement). Furthermore, multiple unit level training activities may be conducted during a larger composite training unit exercise. Using conservative assumptions may produce elevated vessel emissions estimates, but accounts for the possibility (however remote) that each training or testing activity is separately conducted.

Figure D.5-5: Conformity Analysis, San Diego Air Basin (continued)

Naval Gunfire, Missiles, Bombs, Other Munitions and Military Expended Material

Naval gunfire, missiles, bombs, and other types of munitions used in training and testing activities emit air pollutants. To estimate the amounts of air pollutants emitted by ordnance during their use, the numbers and types of munitions used during training or testing activities are first totaled. Then generally accepted emissions factors (AP-42, Compilation of Air Pollutant Emission Factors, Chapter 15: Ordnance Detonation [USEPA 1995]) for criteria air pollutants are applied to the total amounts. Finally, the total amounts of air pollutants emitted by each munition type are summed to produce total amounts of each criteria air pollutant under each alternative.

The estimated annual operational emissions for the No Action Alternative and Preferred Alternative are presented in Table 2. Annual emissions are expected to increase from the No Action Alternative levels to the Preferred Alternative levels over several years. All annual Preferred Alternative emissions would be below General Conformity *de minimis* levels.

Table 2: Estimated Air Pollutant Emissions Under the Proposed Action

Parameter	Emissions by Air Pollutant (TPY)		
	CO	NO_X	VOC
No Action Alternative	176	546	175
Preferred Alternative	243	592	184
Net Change	**67**	**46**	**9**
De Minimis Threshold	100	100	100
Exceeds Threshold?	No	No	No

Notes: Table includes criteria pollutant precursors (e.g., VOC). Individual values may not add exactly to total values due to rounding. CO = carbon monoxide; NO_X = nitrogen oxides; TPY = tons per year; VOC = volatile organic compounds

EMISSIONS EVALUATION CONCLUSION

The U.S. Navy concludes that the *de minimis* thresholds for applicable criteria pollutants would not be exceeded by implementation of the Proposed Action. The emissions data supporting that conclusion are shown in Table 2, which summarizes the calculated estimates and *de minimis* limits. Therefore, the U.S. Navy concludes that further formal Conformity Determination procedures are not required, resulting in this record of Non-Applicability.

Figure D.5-5: Conformity Analysis, San Diego Air Basin (continued)

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Appendix E: Public Participation

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APPENDIX E PUBLIC PARTICIPATION

This appendix includes information about the public's participation in the development of the Hawaii-Southern California Training and Testing Activities (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS).

E.1 PROJECT WEB SITE

A public web site was established specifically for this project, http://www.HSTTEIS.com/. The web site address (originally http://www.HawaiiSOCALEIS.com) was published in the *Notice of Intent to Prepare an Environmental Impact Statement and Overseas Impact Statement* (Appendix B; Federal Register Notices). It was subsequently re-printed in newspaper advertisements, agency letters, and postcards for the Notice of Intent, Notices of Availability, and Notice of Public Meetings. The scoping meeting fact sheets, public meeting fact sheets, technical reports, and various other materials are available on the project web site and will be made available throughout the course of the project.

E.2 SCOPING PERIOD

The public scoping period began with the issuance of the Notice of Intent in the *Federal Register* on 15 July 2010 (Appendix B; Federal Register Notices). This notice included a project description and scoping meeting dates and locations. The scoping period lasted 60 days, concluding on 14 September 2010. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS. The Navy made significant efforts to notify the public to ensure maximum public participation during the scoping process, including using stakeholder notification letters, postcard mailers, press releases, and newspaper display advertisements. The meetings were structured in an open house format, presenting informational posters and written information, with Navy staff and project experts available to answer participants' questions. Section E.2.1 describes the United States (U.S.) Department of the Navy's (Navy's) notification efforts during scoping. The scoping period allowed a variety of opportunities for the public to comment on the scope of the EIS/OEIS.

E.2.1 PUBLIC SCOPING NOTIFICATION

The Navy made significant efforts at notifying the public to ensure maximum public participation during the scoping process. A summary of these efforts follows.

E.2.1.1 Scoping Notification Letters

Notice of Intent/Notice of Scoping Meeting Letters were distributed on 14 July 2010, to 230 federal, state, and local elected officials and government agencies. Recipients included:

Federal
U.S. Senators (Hawaii, California)
U.S. Representatives (California Districts 35, 36, 37, 44, 46, 48, 49, 50, 52, and Hawaii Districts 1 and 2)
Federal Aviation Administration
    Washington, D.C., Headquarters
    Western Pacific Region
U.S. Army Corps of Engineers
    Pacific Ocean Division
        Honolulu District
    South Pacific Division
        Los Angeles District

- U.S. Department of Commerce
  - National Oceanic and Atmospheric Administration
    - National Marine Fisheries Service
      - Washington, D.C., Headquarters
      - Southwest Regional Offices
      - Southwest Fisheries Science Center
      - Pacific Islands Regional Office
      - Pacific Islands Fisheries Science Center
      - Office of Habitat Conservation
        - Southwest Regional Office
        - Pacific Islands Regional Habitat Conservation Division
      - Office of Protected Resources
        - Headquarters and Pacific Islands Region
  - Channel Islands National Marine Sanctuary
  - Hawaiian Islands Humpback Whale National Marine Sanctuary
  - Papahanaumokuakea Marine National Monument
- U.S. Department of Homeland Security
  - U.S. Coast Guard
    - District 11
    - District 14
    - Office of Operating and Environmental Standards
- U.S. Department of the Interior
  - Bureau of Indian Affairs
    - Pacific Regional Office
    - Southern California Agency
  - Bureau of Land Management
    - California Coastal National Monument
  - Bureau of Ocean Energy Management, Regulation, and Enforcement
    - National Offshore Office
    - Pacific Outer Continental Shelf Region
  - Channel Islands National Park
  - National Park Service
    - Pacific West Region
  - Office of Environmental Policy and Compliance
    - Oakland Region
- U.S. Environmental Protection Agency
  - National Environmental Policy Act Compliance Division
  - Region IX (San Francisco)
  - Washington, D.C., Headquarters
- U.S. Fish and Wildlife Service
  - Carlsbad Office
  - Pacific Regional Office
  - Pacific Southwest Regional Office
  - Ventura Office
  - San Diego Bay National Wildlife Refuge
  - San Diego National Wildlife Refuge
  - Hanalei National Wildlife Refuge
  - Huleia National Wildlife Refuge

- James Campbell National Wildlife Refuge
- Kealia Pond National Wildlife Refuge
- Kilauea Point National Wildlife Refuge
- Pearl Harbor National Wildlife Refuge

Marine Mammal Commission
U.S. Geological Survey
- Western Region Offices
  - California Water Science Center
  - Pacific Islands Water Science Center
  - Western Fisheries Research Center

State of California
Office of the Governor
- Office of Planning and Research, Military Affairs

State Senators (Districts 27, 33, 35, 38, and 39)
State Assembly members (Districts 54, 55, 74, 75, 76, 77, 78, and 79)
California Coastal Commission
Department of Conservation
- Division of Land Resource Protection

Department of Fish and Game
- Marine Life Protection Act Blue Ribbon Task Force
- Marine Region 7
- South Coast Region 5
- Wildlife Branch

Department of Parks and Recreation
Department of Public Health
Department of Transportation
- Division of Aeronautics, Office of Airports

Department of Toxic Substance Control
- Region 4

Department of Veterans Affairs
Environmental Protection Agency
- Air Resources Board
- Office of Environmental Health Hazard Assessment
- Office of the Secretary

Natural Resources Agency
Office of Historic Preservation
State Lands Commission
State Water Resources Control Board
- Los Angeles Regional Water Quality Control Board
- San Diego Regional Water Quality Control Board
- Santa Ana Regional Water Quality Control Board

Wildlife Conservation Board

State of Hawaii
Office of the Governor
State Senators (all)
State Representatives (all)
Department of Business, Economic Development, and Tourism

Hawaii Coastal Zone Management Program
State Land Use Commission
Department of Hawaiian Home Lands, Office of the Chairman
Department of Health
Department of Land and Natural Resources
Division of Aquatic Resources
Division of Conservation and Resources Enforcement
Division of Forestry and Wildlife
Division of State Parks
Historic Preservation Division
Island Burial Councils (Hawaii, Kauai/Niihau, Maui/Lanai, Molokai, and Oahu)
Office of Conservation and Coastal Lands
Department of Transportation
Airports Division
Harbors Division
Office of Hawaiian Affairs

Local - California

City of Avalon
City of Coronado
City of Dana Point
City of Huntington Beach
City of Imperial Beach
City of Laguna Beach
City of Long Beach
City of Los Angeles
City of Malibu
City of Newport Beach
City of Oceanside
City of San Diego
County of Los Angeles
County of Orange
County of San Diego
Port of Long Beach
Port of Los Angeles
San Diego Unified Port District

Local - Hawaii
City and County of Honolulu
County of Hawaii
County of Kauai
County of Maui

E.2.1.2 Postcard Mailers

On 21 July 2010 postcards were mailed to 1,288 organizations and individuals on the HSTT project mailing list, which was compiled from previous Hawaii and Southern California Navy NEPA project mailing lists, with the scoping meeting dates, locations, and times.

E.2.1.3 Press Releases

Press releases to announce the Notice of Intent were distributed on 15 July 2010.

E.2.1.4 Newspaper Display Advertisements

Advertisements were made to announce the scoping meetings in the following cities and newspapers on the dates indicated below:

San Diego	Long Beach	Maui
Union Tribune	*Long Beach Press-Telegram*	*Maui News*
Saturday, July 17, 2010	Saturday, July 17, 2010	Saturday, July 17, 2010
Sunday, July 18, 2010	Tuesday, July 20, 2010	Sunday, July 18, 2010
Monday, July 19, 2010	Wednesday, July 21, 2010	Monday, July 19, 2010
Wednesday, July 21, 2010	Thursday, July 22, 2010	Thursday, August 12, 2010
Wednesday, July 28, 2010	Friday, July 30, 2010	Sunday, August 22, 2010
Monday, August 2, 2010	Tuesday, August 3, 2010	Wednesday, August 25, 2010
Tuesday, August 3, 2010	Wednesday, August 4, 2010	Thursday, August 26, 2010
Wednesday, August 4, 2010	Thursday, August 5, 2010	Friday, August 27, 2010

Honolulu/Oahu	Lihue/Kauai	Hilo/Big Island
Honolulu Star-Advertiser	*The Garden Island*	*Hawaii Tribune-Herald*
Saturday, July 17, 2010	Saturday, July 17, 2010	Saturday, July 17, 2010
Sunday, July 18, 2010	Sunday, July 18, 2010	Sunday, July 18, 2010
Monday, July 19, 2010	Monday, July 19, 2010	Monday, July 19, 2010
Tuesday, August 10, 2010	Monday, August 9, 2010	Wednesday, August 11, 2010
Wednesday, August 18, 2010	Thursday, August 19, 2010	Thursday, August 19, 2010
Monday, August 23, 2010	Sunday, August 22, 2010	Tuesday, August 24, 2010
Tuesday, August 24, 2010	Monday, August 23, 2010	Wednesday, August 25, 2010
Wednesday, August 25, 2010	Tuesday, August 24, 2010	Thursday, August 26, 2010

E.2.2 SCOPING MEETINGS

Six scoping meetings were held on August 4, 5, 24, 25, 26, and 27 in the cities of San Diego, CA; Lakewood, CA; Lihue, HI; Honolulu, HI; Hilo, HI; and Kahului, HI, respectively. At each scoping meeting, staffers at the welcome station greeted guests and encouraged them to sign in to be added to the project mailing list to receive future notifications. In total, 131 people signed in at the welcome table. The meetings were held in an open house format, presenting informational posters and written information, with Navy staff and project experts available to answer participants' questions. Additionally, a digital voice recorder was available to record participants' oral comments. The interaction during the information sessions was productive and helpful to the Navy.

What is a scoping meeting?

The scoping period determines the extent of the EIS in terms of significant issues. Scoping meetings allow the face-to-face exchange of information and ideas to ensure relevant topics are identified and properly studied and that the Draft EIS is thorough and balanced.

E.2.3 PUBLIC SCOPING COMMENTS

Scoping participants submitted comments in five ways:

- Oral statements at the public meetings (as recorded by the tape recorder)
- Written comments at the public meetings
- Written letters (received any time during the public comment period)
- Electronic mail (received any time during the public comment period)
- Comments submitted directly on the project web site (received any time during the public comment period)

In total, the Navy received comments from 72 individuals and groups during the scoping comment period. Because many of the comments addressed more than one issue, 228 total comments resulted. Table E-1 provides a breakdown of areas of concern based on comments received during scoping. The summary following Table E-1 provides an overview of comments and is organized by area of concern.

Table E.2-1: Public Scoping Comment Summary

Area of Concern	Count	Percent of Total
Sonar/Underwater Detonations	44	19.3%
Marine Mammals	43	18.9%
Other	30	13.2%
Fish/Marine Habitat	29	12.7%
Meeting/NEPA Process	11	4.8%
Alternatives	10	4.4%
Regional Economy	9	3.9%
Noise	9	3.9%
Threatened and Endangered Species	8	3.5%
Proposed Action	7	3.1%
Water Quality	6	2.6%
Air Quality	5	2.2%
Depleted Uranium	5	2.2%
Public Health and Safety	4	1.8%
Cumulative Impacts	4	1.8%
Terrestrial/Birds	3	1.3%
Recreation	1	0.4%
TOTAL	**228**	

E.2.3.1 Sonar and Underwater Detonations

Many comments mentioned concerns about the effect of Navy sonar on marine life, such as marine mammals, fish, sea turtles, and sea invertebrates. Participants frequently requested that the EIS/OEIS consider alternative technologies to mid-frequency active sonar.

E.2.3.2 Biological Resources-Marine Mammals

A significant number of participants expressed concerns about impacts to marine mammals, primarily from the use of Navy sonar. It was frequently requested that the EIS/OEIS consider alternative technologies to mid-frequency active sonar.

E.2.3.3 Other

This category of comments expressed the desire to close all military bases, that all military activities should cease, and the land be returned to the native Hawaiian people. There were several comments expressing that activities be performed elsewhere.

E.2.3.4 Biological Resources-Fish and Marine Habitat

A significant number of participants expressed concerns about impacts to fish and marine habitat.

E.2.3.5 Meetings/National Environmental Policy Act Process

Comments on the National Environmental Policy Act (NEPA) process included several that felt the information available during the scoping process was inadequate to provide informed comments. There was one comment stating that the Navy HSTT informational video was too basic. There were also comments received indicating a desire for more active public participation at scoping meetings via public speaking at the scoping meetings.

E.2.3.6 Alternatives

Most comments regarding alternatives were in opposition to the current training and testing activities of the Navy in general. Many expressed concerns about the perceived expansion of the training and testing activities area that now includes an adjusted Study Area and a transit corridor between Hawaii and California.

E.2.3.7 Regional Economy

There were several comments regarding regional economic concerns, including questions about the effects on commercial shipping and commercial fishing.

E.2.3.8 Noise

Many participants in the commenting process wanted to know what the noise impacts would be to marine mammals and how they would be protected from acoustic trauma.

E.2.3.9 Threatened and Endangered Species

Concerns in this area were about ensuring that endangered marine mammals and other species would not be harmed during Navy activities.

E.2.3.10 Proposed Action

The comments pertaining to the Proposed Action requested more details on the web site regarding the planned activities and request for a timeline to be presented for the use of the HSTT area.

E.2.3.11 Biological Resources-Onshore

Terrestrial issues mentioned were concerns about habitat fragmentation and potential damage to intertidal, inland, or upland resources.

E.2.3.12 Water Quality

Water quality comments included general concerns about the potential contaminants in the water.

E.2.3.13 Air Quality

Comments in this category expressed concern about the effects of military activities on air quality, including off-shore emissions.

E.2.3.14 Depleted Uranium

The concern with depleted uranium was the effect of its use on the environment in general.

E.2.3.15 Public Health and Safety

One comment was made regarding the safety challenge of military ship transits through San Diego Bay. Another participant expressed concern over the effect on people of sonar testing.

E.2.3.16 Cumulative Impacts

Comments in this category expressed concern about the overall impact of military activity in the HSTT Study Area.

E.2.3.17 Terrestrial/Birds

Comments in this area addressed the impact of training activities on birds and the land.

E.2.3.18 Recreation

One comment regarding recreation was concerned about how all levels of Navy sonar use would impact recreational activities.

E.3 PUBLIC COMMENT PERIOD FOR THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

The 60-day public comment period on the Draft EIS/OEIS began with the issuance of the Notice of Availability and a Notice of Public Meetings in the Federal Register on 11 May 2012 (Appendix B; Federal Register Notices). The public comment period began on 11 May 2012 and concluded on 10 July 2012. The Navy made significant efforts to notify the public to ensure maximum public participation during the public comment period, including using postcards, press releases, and newspaper display advertisements.

The Notice of Public Meetings included a project description and dates and locations of the five public meetings. The public comment period allowed a variety of opportunities for the public to comment on the Draft EIS/OEIS (Appendix B; Federal Register Notices). Copies of the Draft EIS/OEIS were provided to seven libraries in California and Hawaii, and the document was available on the project web site for review. Navy representatives were available during the open house public meetings to provide information and answer questions one-on-one. Comment sheets were made available to attendees.

Commenters provided their input on the Draft EIS/OEIS in letters submitted through mail, written or oral comments received at the public meetings, and via the project web site. The Navy also received form letters from one non-governmental organization and a petition from another non-governmental organization. Approximately 76,000 copies of one form letter were received, and there was an online

petition that generated approximately 477,000 signatures (See Sections E.3.2.1 and E.3.2.2, respectively).

Additionally, during the 60-day public comment period, comments were received from 5 federal agencies, 10 state/local/regional agencies, 2 Native-American Tribes, 18 non-governmental organizations, and approximately 850 private individuals (approximation due to duplicate comments received).

Tables E.3-1, E.3-2, E.3-3, and E.3-4 provide a listing of all comments received on the Draft EIS/OEIS and the Navy's response. Each row in these tables presents the identification of the commenter, the comment, and the Navy's response to the comment. Because many commenters touched on more than one topic, the commenter's topics were separated into individual comments, assigned a number, and responded to separately. The commenter's name is abbreviated when the comment is broken into more than one topic. The comment numbering system also captures whether the comment was received electronically via HSTTEIS.com or a computer at one of the public meetings, in written form by mail or during a public meeting, or orally during public testimony at a public meeting. For example, the first of the agency comments is by the U.S. Environmental Protection Agency, Region IX. Since their comments cover several topics, these are separated into subsequent comments named USEPA-02, USEPA-03, etc.

Responses to all comments were prepared and reviewed for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered with the exception that expletives and personal information were removed, as necessary.

Table E.3-1 contains comments from federal, state, and local agencies received during the public comment period and the Navy's response.

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Table E.3-1: Responses to Comments from Agencies

Commenter	Comment	Navy Response
U.S. Environmental Protection Agency – Region IX-01 (Written)	We have rated the DEIS as Environmental Concerns- Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"), based on the adverse impacts to marine resources described in the DEIS, and our concern that the information provided in the document does not sufficiently assess such impacts. While we defer to the National Marine Fisheries Service's expertise regarding the likely adverse affect of proposed project on marine mammals and sea turtles, we believe that the FEIS would benefit from improved and corrected disclosure of impacts. Please see the enclosed detailed comments for more information regarding our concerns. EPA appreciates the opportunity to review this DEIS. When the Final EIS is released for public review, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521 or Tom Kelly, the lead reviewer for this project, at 415-972-3856 or kelly.thomasp@epa.gov.	Navy responses are provided to the specific comments below. A copy of the Final EIS/OEIS will be delivered to U.S. EPA Region IX per the request.
USEPA-02	Acoustic Impacts The DEIS frequently mentions the Navy Acoustic Effects Model as the source of the estimates of impacts on marine mammals and sea turtles. The Navy's website contains a supporting technical document that discusses the model and its results. While the supporting technical document appears consistent in many respects with the DEIS, the hours of sonar operation modeled in the technical report (Table 14) differ from the hours of sonar use in the DEIS (Table 3.0-8) for some source classes. For example, the technical report indicates the hours of operation for Sonar Source Class LF-4 (Low-frequency sources equal to 180 dB and up to 200 dB) for the preferred alternative is 87 hours, while the DEIS indicates that number is 2,157. Similarly, the number of mammal species experiencing permanent threshold shift (i.e., permanent noise-induced hearing damage) differs between the reports. For example, the technical report indicates that annual testing events would result in permanent threshold shift for nearly 5,850 Short-Beaked Common Dolphins (Table 19), while the DEIS indicates that number would be 309 (Table 3.4-14). Recommendation: The FEIS should correct any discrepancies between the technical report and the FEIS.	Late changes to the technical document were not included in the Draft EIS/OEIS, but have been corrected in the Final EIS/OEIS. The Technical Report itself has been revised also, and can be found on the HSTTEIS.com website.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
USEPA-03	Mitigation Measures Ramp-Up The DEIS clarifies the distinction between training and testing in Section 1.4, emphasizing the need for training to "be as realistic as possible to provide the experiences so important to success and survival" (p. 1-5). It separates testing into several categories: scientific research and testing, private contractor testing, developmental testing, operational testing, fleet training support, follow-on test evaluation and maintenance and repair testing (1-7). We note that, under the preferred alternative, sonar testing results in more level A harassment to marine mammals than does sonar training. Mitigation considered but rejected from the DEIS discusses the concept of sonar "[r]ampup procedures, (slowly increasing the sound in the water to necessary levels)" (p. 5-55), which appears to be a process that greatly reduces the effects of sonar for many testing processes. Ramp up procedures are dismissed for training because they would not allow the Navy to "train as they fight," but the DEIS also states, "ramp-up procedures have been used in testing." Recommendation: The FEIS should include a more thorough discussion of ramp-up, either as a mitigation measure or an operational procedure, for testing (not training) activities listed in Chapter 2. We recognize that ramp-up would not be appropriate in many sonar testing procedures (e.g. where testing is concurrent with training), but the FEIS should disclose the circumstances under which it would be compatible with testing.	The Navy has considered ramp-up of sound sources during testing, and very rarely practices this procedure (only as needed). For a description of those rare circumstances when a ramp-up is necessary, see Section 5.3.4.2.1 (Implementing Active Sonar Ramp-Up Procedures During Testing) of Chapter 5 in the Draft EIS/OEIS. However, in most cases a ramp-up is either ineffective or would impact the purpose of the test event. Regarding the effectiveness and practicality of ramp-up for testing, the following points are provided for explanation: 1. Most testing must be performed "realistically" as in training, either as the stated goal of the particular test, or because the test is "piggy-backing" on a training event, where ramp-up would be counter to the training objectives. 2. Some tested systems are either "on" or "off" and can't be ramped up. 3. Nearly all of the potential effects to marine mammals result from sound sources that have significant intervals between "pings," and are on moving platforms, typically ships. Because the ship is moving, the ramp up of a signal would begin in one location, but the increased, or "ramped up" signal would be generated in a different location, nullifying the effect of the lower energy ramp-up signal. For example, the ASW sonar used on a DDG will nominally transmit at 50 second intervals. A ship traveling at 15 nautical miles per hour (a typical speed) would move approximately 400 yards in the time between pings. 4. Finally, the summation of energy is what contributes to most effects, and a ramp up before actual training or testing could begin would require putting more total sound energy into the water and result in more exposure to marine species.
USEPA-04	Identification of Cautionary Areas and Coral Reef Resources The DEIS discusses the designation of a humpback whale cautionary area, "which consists of a 5 km (3 .1 miles) buffer zone that has been identified as having one of the highest concentrations of humpback whales during the critical winter months" (p. 5-45). From December 15 to April 15, the cautionary area will only be used for training if approval is granted by the commander of the U.S. Pacific Fleet, taking into account "the Navy's commitment to fully consider and balance mission requirements with environmental stewardship" (p. 5.45-46). It is not clear whether the area identified in the DEIS as a cautionary area is within or consistent with the boundaries of the Hawaiian	A figure depicting the Navy Humpback Whale Cautionary Area (Figure 5.3-1) has been added to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS. Maps showing coral locations are located in the Marine Habitats section, Figures 3.3-3 through 3.3-6. The Navy Humpback Whale Cautionary Area is not intended to prevent Navy activities from taking place in the Cautionary Area, nor is it intended to provide protection for coral. The Protective Measures Assessment Protocol is not merely a

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	Islands Humpback Whale National Sanctuary managed by NMFS. The DEIS also includes a mitigation measure to limit training and testing within 350 yards of coral reefs (p. 5-46). While it discusses the inclusion of coral reefs and other protected areas in the Navy's mapping program, known as the Protective Measures Protocol Assessment, the DEIS does not include a map of these areas. Recommendation: The FEIS should clarify the relationship, if any, of the Humpback Whale Cautionary Area to the Hawaiian Islands Humpback Whale National Sanctuary, and include a map of the Area, as well as a map of coral reefs that will be avoided. By including these maps in the FEIS, or making them available through a link similar to DEIS technical reports, the Navy and NMFS could invite comments on the accuracy or thoroughness of the maps from researchers and ocean protection groups.	"mapping program." As described in Section 5.2.2.2 (Protective Measures Assessment Protocol), the protocol is a decision support and situational awareness tool that provides information about required mitigation, a visual display of the exercise area, the unit's position relative to the target area, and any relevant environmental data.
International Boundary and Water Commission (Written)	During our review of the EIS it appears that the operations conducted under this EIS do not impact any of the property or interests of the USIBWC, however, the USIBWC would like to note the location of the South Bay Ocean Outfall located off shore of Imperial Beach. The South Bay Ocean Outfall extends 23,600 feet in a westerly direction from near the mouth of the Tijuana River. The South Bay Ocean Outfall is a treated wastewater effluent pipe containing a vertical drop shaft located on the land that descends 190 feet to a horizontal tunnel that extends 18,970 feet under the ocean floor to a riser assembly that ascends 160 feet to the seafloor. At the seafloor the outfall extends 4,670 feet west along the seafloor to a wye diffuser. From this wye diffuser, two diffuser legs extend 1,974 feet north and south and terminate at a depth of approximately 93 feet below sea level. The terminus of the diffuser is located at Latitude 32° 32' 15" North and Longitude 117° 11' 00" West. The outfall, based on the maps provided in the EIS, lies slightly to the east of the HSTT in this area, however, any operations in the area of the outfall should use caution as any unmanned and manned vehicles, munitions, and divers could present a hazard to the outfall. Thank you again for the opportunity to review and comment on the subject document for the proposed project. Should you or your staff have questions, please contact me at (915) 832-4749 or Mr. Wayne Belzer at (915) 832-4703.	The Navy appreciates this information.
Marine Mammal Commission-01 (Written)	The Marine Mammal Commission recommends that the Navy- • revise the DEIS by expanding the range of alternatives under consideration to include at least one with lower levels of training and testing activities. Doing so is particularly important at this time when decision-makers may be faced with the choice of reducing the Navy's budget and, if they do so, they should be well informed about the environmental consequences of the various decisions that they might make;	The Navy developed the alternatives considered in this EIS/OEIS after careful assessment of the Navy's training and testing requirements by subject matter experts, including military units and commands that utilize the ranges, military range management professionals, and Navy environmental managers and scientists. The environmental consequences of individual activities (e.g., torpedo exercises, mine countermeasures exercises, tracking exercises, etc.) have been analyzed in the EIS/OEIS with sufficient detail to inform the decision maker of the environmental consequences of making a budget-related

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		reduction in training or testing activity if needed.
MMC-02	• revise the discussion of North Pacific right whales by (1) moving it from the section on species unlikely to be found in the study area (i.e., 3.4.1.1) to the section discussing other marine mammals in the study area (i.e. section 3.4.2) and (2) expanding it to provide a more complete review of their status and threats; • undertake research to determine if North Pacific right whales use or regularly migrate through Navy training and testing areas in the Pacific during fall and winter months-that research should include satellite telemetry studies to identify the migratory routes and overwintering areas of whales using summer feeding grounds in the Southeast Bering Sea and passive acoustic monitoring to detect right whale vocalizations in the Hawaii and southern California training and testing areas;	Applying the best scientific information available, and as described in the Draft EIS/OEIS, there is ample evidence to support the Navy's conclusion that North Pacific right whales are unlikely to be present in the Study Area. Further, with no density information on this species for the Study Area, no quantitative impact analysis could be conducted. While new research that goes beyond existing studies are not required for an EIS, the Navy will continue to work with its Scientific Advisory Group to determine to determine appropriate research objectives, however the Navy has been and continues to fund passive acoustic monitoring in the areas of the Pacific where training and testing occurs. For details on the Scientific Advisory Group and the Navy's monitoring efforts, see http://www.navymarinespeciesmonitoring.us/
MMC-03	• adjust all acoustic and explosive thresholds for low-, mid-, and high-frequency cetaceans by the appropriate amplitude factor (e.g., 16.5 or 19.4 dB), if it intends to use the type II weighting functions as depicted in Figure 6 of Finneran arid Jenkins (2012);	The thresholds were adjusted based on weighting the exposures from the original research from which the thresholds were derived with the Type II weighing functions. The weighted threshold is not derived by a simple amplitude shift.
MMC-04	• explain why Kastak et al. (2005) data were used as the basis for explosive thresholds in pinnipeds and specify the extrapolation process and factors used as the basis for associated TTS thresholds;	The same offset between impulsive and non-impulsive temporary threshold shift found for the only species where both types of sound were tested (beluga) was used to convert the Kastak data (which used non-impulsive tones) to an impulsive threshold. This method is explained in Finneran and Jenkins (2012) and Southall et al. (2007).
MMC-05	• provide detailed information regarding how it determined marine mammal takes that occur when multiple types (i.e., acoustic, explosive, and non-explosive impulsive) of sound producing sources of varying frequencies (i.e., low, mid, and high) are used simultaneously;	Events involving multiple source types (e.g., acoustic vs. explosive) are treated as separate events, and the sound exposure levels are not summed. Furthermore, in most cases, explosives and sonar are not used within the same activities and therefore are unlikely to affect the same animals over the same time period. Energy is summed for multiple exposures of similar source types. For sonars, including use of multiple systems within any scenario, energy is accumulated within the following four frequency bands: low-frequency, mid-frequency, high-frequency, and very-high-frequency. After the energy has been summed within each frequency band, the band with the greatest amount of energy is used to evaluate the onset of PTS or TTS. For explosives, including use of multiple explosives in a single scenario, energy is summed across the entire frequency band. Please see *Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Phase II Hawaii-Southern California Fleet Training and Testing EIS/OEIS* (Naval Undersea Warfare Center 2012) on the

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		HSTTEIS.com website for additional explanation.
MMC-06	• use its spatially and temporally dynamic simulation models to estimate strike probabilities for specific activities (i.e., movements of vessels, torpedoes, unmanned underwater vehicles and expended munitions, ordnance, and other devices) rather than using simple probability calculations;	The recommendation of the Marine Mammal Commission to use a dynamic simulation model to estimate strike probability was considered, but the Navy found that use of historical data was more appropriate for the analysis. The strike probability analysis completed in this EIS/OEIS is based upon actual data collected from historical use of vessels, in-water devices, and military expended materials and the likelihood that these items may even have the potential to strike an animal. These data account for real world variables over the course of many years, and any model would be expected to be less accurate than the use of actual data.
MMC-07	• provide the predicted average and maximum ranges for all criteria (i.e., behavioral response, ITS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality), for all activities (i.e., based on the activity category and representative source bins), and all functional hearing groups of marine mammals;	Ranges to effects for all criteria and functional hearing groups are provided for representative active sonars (Section 3.4.3.2.1.1, Range to Effects) and explosives (Section 3.4.3.2.2.1, Range to Effects). The representative sources include the most powerful active sonar source and the largest proposed charge weight analyzed. The Navy needs to conduct testing and training in a variety of environments having variable acoustic propagation conditions. These variations in acoustic propagation conditions are considered in the Navy's acoustic modeling and the quantitative analysis of acoustic impacts; average ranges to effect are provided in the EIS to show the reader typical zones of impact around representative sources.
MMC-08	• use passive and active acoustics, whenever practicable, to supplement visual monitoring during the implementation of its mitigation measures for all activities that generate sound;	Passive acoustic monitoring is already and will continue to be implemented with several activities (e.g., Improved Extended Echo Ranging sonobuoys and torpedo [explosive] testing). I As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006)

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		accessible on the NMFS Office of Protected Resources website.
MMC-09	• cease the use of its sound sources (including explosive activities that do not use time-delay firing devices) and not reinitiate them for periods at least as long as the maximum dive times of the species observed (if identified to species) or likely to be encountered (if species identification is uncertain), after the sighting of one or more marine mammals within or about to enter a mitigation zone;	As described in the Final EIS/OEIS in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), a 30 min. wait period more than covers the average dive times of most marine mammal species but may not be sufficient for some deep-diving marine mammal species or for sea turtles. However, the analysis in Section 3.4.3.1.1 (Non-Impulsive and Impulsive Sound Sources) shows that injury to deep-diving marine mammals (e.g., sperm whales and beaked whales) is not expected to occur. Furthermore, any wait period greater than 30 min. would result in an unacceptable operational impact on readiness.
MMC-10	• adjust the size of the mitigation zone for mine neutralization events using the average swim speed of the fastest swimming marine mammal occurring in the area where time-delay firing devices would be used to detonate explosives;	The principles of HSTT time-delay firing device mitigation are similar to those contained within the 2011 VACAPES Letter of Authorization. For time delay activities, the mitigation zone is 1,000 yd. for all charge sizes (5, 10, and 20 lb. charges) and for a maximum time-delay of 10 min. The mitigation zone takes into account a portion of the distance that a marine mammal could potentially travel during the time delay. However, the mitigation zone was set at 1,000 yd. because that is the maximum distance that Lookouts in two small boats can realistically observe. The use of more than two boats for observation during this activity presents an unacceptable impact to readiness due to limited personnel resources. If a swim speed of 3 knots (101 yd./min.) (A nominal average for a delphinid in this area) is considered, the 1,000-yd. mitigation zone results in coverage of the potential range to mortality for all charges, including up to a 9 min. time delay. Furthermore, the mitigation zone covers the potential range to injury for 5 lb. charges, including up to a 6 min. time delay, and for 10 lb. and 20 lb. charges, including up to a 5 min. time delay. The 3 knot swim speed, therefore, was a consideration, but not the only determining factor in development of the time delay mitigation zones; therefore, considering different swim speeds would not result in a change to or expansion of the mitigation zone size for time delay activities. The Navy asserts that the 1,000 yd. time delay zone is both practical and protective. The proposed HSTT mitigation zone covers the entire predicted maximum range to PTS as well as a portion of the estimated swim speed distance. Due to practicality of implementation and impact on the effectiveness of the military readiness activity, the proposed

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		mitigation zone represents the maximum distance that Lookouts on small boats can adequately observe given the number of personnel who will be involved. The use of more than two boats for observation during this activity presents an unacceptable impact on readiness due to limited personnel and equipment resources. Takes that cannot be avoided through mitigation are considered in the MMPA permitting process. Species-specific identification of marine mammals is not a Lookout requirement; therefore, a single activity-specific waiting time is needed between species.
MMC-11	• revise its DEIS by (1) including in its cumulative impacts analysis all potential risk factors, whether they are deemed individually significant or negligible and (2) describing the specific details needed for 'the reader to evaluate the utility of the Navy's conceptual framework for its cumulative impacts analysis.	As stated in Section 4.4.1 (Resource Areas Dismissed from Current Impact Analysis) of the Draft EIS/OEIS, in accordance with Council on Environmental Quality guidance, the cumulative impacts analysis focused on impacts that are “truly meaningful.” This was accomplished by reviewing the direct and indirect impacts that would occur on each resource under each of the alternatives. Key factors considered were the current status and sensitivity of the resource and the intensity, duration, and spatial extent of the impacts of each potential stressor. In general, long-term rather than short-term impacts and widespread rather than localized impacts were considered more likely to contribute to cumulative impacts. Those impacts to a resource that were considered to be negligible were not considered further in the analysis. The level of analysis for each resource was commensurate with the intensity of the impacts identified in Chapter 3 (Affected Environment and Environmental Consequences).
MMC-12	The no action alternative In this and several prior environmental impact statements for various range complexes, the Navy uses the term "no action" to mean continued use at the current level. The Navy cites guidance from the Council on Environmental Quality as the basis of its selection of this baseline as the no action alternative against which other alternatives are compared. The Council on Environmental Quality has published guidance (http://ceq.hss.doe.gov/nepa/regs/40/1-10.HTM) that posits two alternative interpretations of what constitutes no action. The first is that the action would not take place at all. Under this alternative, the impacts of the other alternatives would be assessed against not conducting any training or testing activities. As characterized by the Navy (page 2-62), the second interpretation "allows the No Action Alternative to be thought of in terms of continuing with the present course of action until that action is changed." The referenced guidance states that- The first situation might involve an action such as updating a land management plan where ongoing management programs initiated under	The Navy developed the alternatives considered in this EIS/OEIS after careful assessment by subject matter experts, including military units and commands that utilize the ranges, military range management professionals, and Navy environmental managers and scientists. A reduction in training and testing activities would fail to meet the Purpose and Need and would not allow the Navy to meet its obligations under Title 10. Refer to Section 2.5 (Alternatives Development) of the Draft EIS/OEIS for an explanation of the alternatives development. The Navy has analyzed individual activities within the document with sufficient detail to inform a decision-maker of the environmental consequences of a making a future budget-related reduction in training or testing activities.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	existing legislation and regulations will continue, even as new plans are developed. In these cases "no action" is "no change" from current management direction or level of management intensity. To construct an alternative that is based on no management at all would be a useless academic exercise. Therefore, the "no action" alternative may be thought of in terms of continuing with the present course of action until that action is changed. Consequently, projected impacts of alternative management schemes would be compared in the EIS to those impacts projected for the existing plan. In this case, alternatives would include management plans if both greater and lesser intensity, especially greater and lesser levels of resource development. (Emphasis added) The Navy has chosen to use a continuation of current activities as the no action alternative. The Commission understands that choice and considers it reasonable as long as the environmental impacts of all major current activities have been assessed appropriately. However, the Commission must question the selection of the other alternatives because, as a set, they do not satisfy the requirement under the applicable guidance that the DEIS consider management of both greater and lesser intensity. Therefore, the Marine Mammal Commission recommends that the Navy revise the DEIS by expanding the range of alternatives under consideration to include at least one with lower levels of training and testing activities. Doing so is particularly important at this time when decision makers may be faced with the choice of reducing the Navy's budget and, if they do so, they should be well informed about the environmental consequences of the various decisions that they might make.	
MMC-13	Marine mammal occurrence Sections 3.4.1 and 3.4.2 in the DEIS are very well drafted generally. Those sections include relevant, up-to-date, and accurate information on most species of marine mammals. However, the Navy assumed that North Pacific right whales would be unlikely to occur in either the Hawaii or Southern California study areas. It stated that the presence of North Pacific right whales in the study area is extremely low, as they have been sighted only rarely in the Bering Sea and Gulf of Alaska in recent years. Although sightings of right whales in the study area are rare, this may be due to the small size the North Pacific right whale population rather than a lack of importance of the area as habitat for the species. In recent years, a few North Pacific whales have been seen in the southeast Bering Sea every summer since 1997 when regular efforts to look for them began (Wade et al. 2011). Those sightings indicate that the southeast Bering Sea is an important summer feeding area for the small number of remaining whales. The whales' winter habitat, however, remains unknown and requires further research to identify. All other right whale populations whose winter habitats are known make annual migrations between summer high-latitude feeding grounds and lower-latitude calving	Applying the best scientific information available, and as described in the Draft EIS/OEIS, there is ample evidence to support the Navy's conclusion that North Pacific right whales are unlikely to be present in the Study Area. In consultation with NMFS as a cooperating agency, the scientists in the NMFS Office of Protected Resources have agreed with this assessment. While it is possible that right whales in the North Pacific may, in the future, expand their current range, it remains unlikely they would be present in Hawaii or Southern California in the period covered by the analysis in the EIS/OEIS. If North Pacific right whales did return to Hawaii and Southern California waters, Navy and NMFS would be required by ESA to reopen the regulatory consultation regarding that species. Finally, with regard to the comment recommendations for research, the Navy will continue to work with its Scientific Advisory Group to determine appropriate research objectives. However, the Navy has been funding and continues to fund passive acoustic monitoring in the areas of the Pacific where training and testing occurs. For details on the Scientific Advisory Group and the Navy's monitoring efforts, see

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	grounds. That being the case, right whales feeding in the summer in the southeastern Bering Sea and along the Kurile Islands are likely to migrate to lower latitudes in the winter. Rare as they may be, sightings of right whales in Hawaiian waters indicate that this area may be important for reproductive purposes or at least as part of a migratory corridor. Such habitat use patterns are supported by photographs matching an individual right whale in Hawaii and the southeast Bering Sea in 1996 (Kennedy et al. 2011). Therefore, the DEIS should be revised to note that although their occurrence around Hawaii is uncertain, waters off Hawaii could provide important migratory and winter habitats for North Pacific right whales. Accordingly, the Marine Mammal Commission recommends that the Navy revise the discussion of North Pacific right whales by (1) moving it from the section on species unlikely to be found in the study area (i.e., 3.4.1.1) to the section discussing other marine mammals in the study area (i.e. section 3.4.2) and (2) expanding it to provide a more complete review of their status and threats. Given the extremely endangered status of the North Pacific right whale and the possibility that the Pacific study area may include vital habitat for the species, the Marine Mammal Commission also recommends that the Navy undertake research to determine if North Pacific right whales use or regularly migrate through Navy training and testing areas in the Pacific during fall and winter months-that research should include satellite telemetry studies to identify the migratory routes and overwintering areas of whales using summer feeding grounds in the Southeast Bering Sea and passive acoustic monitoring to detect right whale vocalizations in the Hawaii and southern California training and testing areas.	http://www.navymarinespeciesmonitoring.us/
MMC-14	Criteria and thresholds The Navy proposes to estimate takes resulting from its activities by adjusting received sound levels at different frequencies based on the hearing sensitivity of various groups of marine mammals at those frequencies. The adjustments are based on "weighting" functions derived by Southall et al. (2007) and Finneran and Jenkins (2012; type I and type II weighting functions, respectively). Type I weighting functions (see Figure 1 in Southall et al. 2007) are flat over a wide range of frequencies and then decline at the extremes of the animal's hearing range. Type II weighting functions (Finneran and Jenkins 2012) are used only for cetaceans and combine the precautionary type I curves developed by Southall et al. (2007) with equal loudness weighting functions derived from empirical studies with bottlenose dolphins (Finneran and Schlundt 2011). The Commission considers the theory behind those weighting functions to be sound. However, the amplitudes of the final type II weighting functions appear to have been shifted, lowering the sensitivity at all frequencies by roughly 16-20 dB (compare Figures 2 and 6 of Finneran and Jenkins (2012)). For sonar-related activities Finneran and Jenkins (2012) reduced the acoustic thresholds for low- and mid-frequency cetaceans by 16.5 dB (presumably to account for the amplitude decrease in the type II weighting functions), but it appears that they did not apply a similar adjustment of 19.4 dB for high-	The same offset between impulsive and non-impulsive TTS found for the only species where both types of sound were tested (beluga) was used to convert the Kastak data (which used non-impulsive tones) to an impulsive threshold. This method is explained in Finneran and Jenkins (2012) and Southall et al. (2007).

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	frequency cetaceans. Because data are lacking for TTS thresholds for high-frequency cetaceans exposed to acoustic (i.e., tonal) signals, they appear to add a 6-dB correction factor to the TTS threshold derived from non-explosive impulsive sources (i.e., airguns) based on the method outlined in Southall et al. (2007). However, the Commission's understanding is that Southall et al. (2007) did not use the 6-dB factor to extrapolate between impulsive and acoustic thresholds, but rather to estimate PTS thresholds from TTS thresholds based on peak pressure levels. In addition, it is unclear how the explosive thresholds (i.e., for underwater detonations) were adjusted downward to account for the amplitude decrease in the type II weighting functions. If those thresholds were not adjusted by the appropriate amplitude factor, the Navy may have underestimated takes of marine mammals. To address these concerns, the Marine Mammal Commission recommends that the Navy adjust all acoustic and explosive thresholds for low-, mid-, and high-frequency cetaceans by the appropriate amplitude factor (e.g., 16.5 or 19.4 dB), if it intends to use the type II weighting functions as depicted in Figure 6 of Finneran and Jenkins (2012). For determining TTS thresholds for pinnipeds for underwater detonations, the Navy used data from Kastak et al. (2005) and extrapolation factors from Southall et al. (2007). Kastak et al. (2005) estimated the average sound exposure level for onset-TTS for pinnipeds exposed to octave band underwater sound centered at 2.5 kHz (i.e., mid-frequency sound). However, underwater detonations produce broadband sound in the low-frequency range. The Commission recognizes that Kastak et al. (2005) may be the only available data, but those data may not provide an appropriate basis for estimating those thresholds. Furthermore, the extrapolation factors from Southall et al. (2007) were not stated specifically in the Navy's analysis for underwater detonations, but it appears that they used 6 dB. As noted in the previous paragraph, Southall et al. (2007) seem to use 6 dB as the extrapolation factor for determining PTS thresholds from TTS thresholds based on peak sound pressure levels, not for extrapolating from acoustic to explosive thresholds. Thus, the Commission is unsure why thresholds based on octave-band mid-frequency sound were used for underwater detonations and what extrapolation factors were used and why. Therefore, the Marine Mammal Commission recommends that the Navy explain why Kastak et al. (2005) data were used as the basis for explosive thresholds in pinnipeds and specify the extrapolation process and factors used as the basis for associated TTS thresholds.	
MMC-15	Modeling methods Some of the Navy's activities involve the simultaneous use of multiple source types (i.e., acoustic, explosive, non-explosive impulsive) that generate sound within various frequency bands (i.e., low, mid, and high). To account for activities involving those sources, the Navy has proposed to sum all sound exposure levels received by an animal	Events involving multiple source types (e.g., acoustic vs. explosive) are treated as separate events and the sound exposure levels are not summed. Furthermore, in most cases, explosives and sonar are not used within the same activities and therefore are unlikely to affect the same animals over the same time period. Energy is summed for multiple exposures of similar source types. For sonars, including use

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	in each frequency band. However, the DEIS did not describe how the Navy would sum the sound exposure levels from multiple source types (e.g., acoustic vs. explosive). It also did not explain how the various thresholds for those different source types would be prioritized and applied. In such cases with multiple source types, a simple summation of sound exposure levels may not necessarily estimate takes accurately. In addition, the Navy used three different types of propagation models: the Comprehensive Acoustic System Simulation/ Gaussian Ray Bundle model for acoustic sources, Reflection and Refraction in Multilayered Ocean/Ocean Bottoms with Shear Wave Effects model for explosive sources, and the Range-Dependent Acoustic Model for non-explosive impulsive sources. The DEIS and supporting technical documents did not provide (1) information regarding how the Navy integrated propagation of sound from those three models into its effects model and (2) details regarding how sound exposure levels would be summed. Again, it is not clear whether a basic summation of those sound exposure levels is appropriate. If the Navy used some other algorithm for this summation, it should explain that algorithm. For all of these reasons, the Marine Mammal Commission recommends that the Navy provide detailed information regarding how it determined marine mammal takes that occur when multiple types (i.e., acoustic, explosive, and non-explosive impulsive) of sound-producing sources of varying frequencies (i.e., low, mid, and high) are used simultaneously.	of multiple systems within any scenario, energy is accumulated within the following four frequency bands: low-frequency, mid-frequency, high-frequency, and very high frequency. After the energy has been summed within each frequency band, the band with the greatest amount of energy is used to evaluate the onset of PTS or TTS. For explosives, including use of multiple explosives in a single scenario, energy is summed across the entire frequency band. Please see *Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Phase II Hawaii-Southern California Fleet Training and Testing EIS/OEIS* (Naval Undersea Warfare Center 2012) on the HSTTEIS.com website for additional explanation.
MMC-16	The Navy also estimated the probability of vessels, expended munitions, and non-explosive materials (e.g. sonobuoys) striking a marine mammal. The Navy's method for determining those strike probabilities was based on simple probability calculations. For example, it used a Poisson model to estimate the probability of ship strikes based on the historical rate of ship strikes. Although the use of the Poisson model is not unreasonable for modeling the occurrence of rare events, such as a ship striking a marine mammal, the assumption that the encounter rate will remain the same is questionable if the Navy increases the number of training and testing activities or if the abundance and distribution of marine mammals change. Such an approach may be appropriate for the no action alternative but is clearly deficient for assessing impacts of alternatives 1 and 2. To estimate the probability of spent munitions or non-explosive materials striking marine mammals, the Navy simply compared the aggregated footprint of some specific marine mammal species with the footprint of all objects that might strike them (DEIS Appendix G). Both of those were based only on densities of marine mammals in the action area and expected amount of materials to be expended within a year in those areas. By combining marine mammal densities and those activities over space and time into a single calculation sequence, the Navy provided only a crude estimate of strike probabilities for the "average" condition. Unfortunately, neither marine mammals nor Navy activities are distributed homogeneously in space or time. The Commission does not understand why the Navy did not incorporate spatial and temporal considerations to make its take estimation procedure more realistic biologically. The Navy's model for	The recommendation of the Marine Mammal Commission to use a dynamic simulation model to estimate strike probability was considered, but the Navy found that use of historical data was more appropriate for the analysis. The strike probability analysis completed in this EIS/OEIS is based upon actual data collected from historical use of vessels, in-water devices, and military expended materials and the likelihood that these items may even have the potential to strike an animal. These data account for real world variables over the course of many years, and any model would be expected to be less accurate than the use of actual data.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	determining takes of marine mammals from sound-producing activities can account for moving sound sources and marine mammals. In that model, the Navy could adjust the data collected by the animat dosimeters from received sound level to a close approach distance and estimate strike probabilities more realistically. The Marine Mammal Commission recommends that the Navy use its spatially and temporally dynamic simulation models to estimate strike probabilities for specific activities (i.e., movements of vessels, torpedoes, unmanned underwater vehicles and expended munitions, ordnance, and other devices) rather than using simple probability calculations.	
MMC-17	Table 5.3-2 in the DEIS lists the Navy's predicted distances or ranges over which PTS might occur and recommended mitigation zones. The table categorizes sound sources by type (e.g., MF1:SQS-53 mid-frequency active hull-mounted sonar) and does not include all sources, but rather includes for each category (or bin) the average and maximum distances from the sound source at which PTS could be expected to occur. Chapter 3 of the DEIS also includes tables listing such ranges. However, in Chapter 3, the tables include only a subset of the proposed activities (6 of the 13 explosive activities analyzed) and the average rather than maximum ranges (see Tables 3.4-15). In addition, the DEIS does not provide the ranges to PTS for acoustic sources for more than one ping (Table 3.4-9), as it does for TTS (i.e., 1, 5, and 10 pings; Tables 3.4-10). Instead, the DEIS simply assumes that marine mammals would not maintain a nominal speed of 10 knots parallel to a ship and thereby receive sound from more than a single ping. Absent this kind of information, the DEIS process is not fully transparent and the Commission and public cannot comment on the appropriateness of the proposed mitigation zones. To address those shortcomings in the DEIS, the Marine Mammal Commission recommends that the Navy provide the predicted average and maximum ranges for all criteria (i.e., behavioral response, TTS, PTS, onset slight lung injury, onset slight gastrointestinal injury, and onset mortality), for all activities (i.e., based on the activity category and representative source bins), and all functional hearing groups of marine mammals.	Ranges to effects for all criteria and functional hearing groups are provided for representative active sonars (Section 3.4.3.2.1.1, Range to Effects) and explosives (Section 3.4.3.2.2.1, Range to Effects). The representative sources include the most powerful active sonar source and the largest proposed charge weight analyzed. The Navy needs to conduct testing and training in a variety of environments having variable acoustic propagation conditions. These variations in acoustic propagation conditions are considered in the Navy's acoustic modeling and the quantitative analysis of acoustic impacts; average ranges to effect are provided in the Environmental Impact Statement to show the reader typical zones of impact around representative sources. The range to effects from various acoustic sources are highly dependent on both operating characteristics and environmental variables. The grouping by bin takes into account operating characteristics of the sources and sources within a bin are by definition equal to or lesser in output than the source which represents the bin. It is therefore unnecessary and contrary to the binning approach to provide information for all sources individually. For explosives, it is reasonable to assume that the range for a bin not provided would fall between the next lowest and next highest bins. For these reasons, it is not necessary to provide all average and maximum ranges for all criteria and all sources or bins. With regard to ranges to PTS and as explained in Section 3.4 (Marine Mammals), because the ranges are so short for even the most powerful acoustic source of concern (hull mounted mid-frequency anti-submarine warfare sonar), the ship is moving, and the pings occur approximately every 50 seconds, there is not sufficient overlapping energy from one ping to the next to make presentation of multiple pings useful (each subsequent ping has the same approximate range to PTS from the bow of the ship as the first ping). As noted in the comment and presented in the Draft EIS/OEIS, an animal would have to be exposed to a TTS level first ping and then parallel the ship within

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		close proximity for 50 seconds to receive a second ping potentially resulting in PTS. Given all the science detailed in the EIS/OEIS indicating that marine mammals will behaviorally avoid high levels of sound, the assumption that a marine mammal would not remain along-side a pinging vessel is a simple but reasonable assumption. As presented in the Draft EIS/OEIS, while 10 knots was the speed used in modeling the ship's speed of advance, a ship engaged in anti-submarine warfare training or testing would be moving at between 10 and 15 knots. In addition and as discussed in the Draft EIS/OEIS in Section 3.4.3.1.6.1 (Model Assumptions and Limitations), there are many other conservative inputs made with regard to the modeling that will tend to overestimate impacts such as assuming marine mammals are always facing the source and therefore hearing the maximum sound predicted for a location.
MMC-18	The DEIS notes that the use of observers (lookouts) would increase the likelihood of detecting marine mammals at the surface, but it also notes that the value of visual monitoring is limited and could not be relied on to avoid all impacts to all species. The Commission agrees and has made numerous recommendations to the Navy to characterize the effectiveness of visual observation. Importantly, the Navy is now working with collaborators at the University of St. Andrews to study observer effectiveness. The Commission believes those studies will be very useful once completed. However, until the results are available, the Commission also believes that the Navy should supplement its visual monitoring efforts with other measures rather than simply reducing the size of the zones it plans to monitor. The DEIS does propose to supplement visual monitoring using passive acoustics during activities that generate impulsive sounds (i.e., primarily for explosives), but does not propose the same during the use of (non-impulsive) low-, mid-, and high-frequency active sonar. In contrast, the Navy uses visual, passive acoustic, and active acoustic monitoring during Surveillance Towed Array Sensor System Low Frequency Active (SURTASS LFA) sonar activities to augment its mitigation efforts over large areas. It is not clear why the Navy is not proposing to use those same monitoring methods for the other activities described in the DEIS. To ensure effective monitoring, the Marine Mammal Commission recommends that, whenever practicable, the Navy use passive and active acoustics to supplement visual monitoring during the implementation of its mitigation measures for all activities that generate sound.	Mitigation measures were developed on a case-by-case basis based on predicted potential impacts; therefore, the use of acoustic monitoring is not always warranted, nor practicable from an operational standpoint (Section 5.3.2.1, Acoustic Stressors). Some events do use passive acoustic monitoring as part of the mitigation when practicable, including improved extended echo ranging sonobuoys, explosive sonobuoys using 0.6–2.5 pound net explosive weight, explosive torpedo testing, and sinking exercises. The active sonar system used by SURTASS LFA is built into the system's vertical array and can only be employed in this fashion from a slow-moving platform. It is not possible to employ this system on the types of platforms analyzed in the HSTT EIS/OEIS because it cannot be installed on other ship classes. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		accessible on the NMFS Office of Protected Resources website. .
MMC-19	In addition, the Navy proposes that, if feasible, it will cease acoustic activities (i.e., active sonar transmissions) and explosive activities (i.e., detonations that do not use time-delay firing devices) when a marine mammal is detected within the mitigation zone. Those activities would resume when the animal is "thought to have exited" the mitigation zone. The meaning of "thought to have exited" is not clear, and a more definitive criterion is needed to clarify when activities might be resumed. The current mitigation measures allow the Navy to resume mid-frequency active sonar activities only when a sighted marine mammal has not been resighted for 30 minutes or the vessel has transited more than 2,000 yards beyond the location of the last detection. Those measures also stipulate that explosives cannot be detonated unless a sighted marine mammal has not been resighted for 30 minutes, but those measures do not stipulate a distance because those detonations occur at a fixed location. In any case, the Commission must question all of those approaches if the position of the marine mammal is unknown. That is, the key considerations driving those measures are the relative positions of the marine mammal and the sound source. Their relative positions over time are best estimated as a function of their positions when the marine mammal was first sighted, the speed and heading of the vessel, and the speed and heading of the marine mammal. If the vessel and marine mammal are moving in opposite directions, then the marine mammal may leave the mitigation zone relatively quickly. However, if they are moving in the same direction, then the marine mammal may remain in the mitigation zone for a prolonged period. Unless a sighted marine mammal is resighted leaving or outside the safety zone, the Navy should not resume its activity until it has had a reasonable chance of verifying that it can do so safely. The delay should take into account that (1) a marine mammal may remain underwater where it is not visible, (2) it may change its heading and speed in response to the vessel, and (3) using visual observation alone it is not possible to determine a marine mammal's position relative to the vessel or sound source after the initial sighting, unless the marine mammal surfaces again and is observed.	Clarification of what is meant by "thought to have exited" (based on animal course and speed) as well as additional information on additional post-sighting activity recommencement criteria has been added to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) for each activity. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
MMC-20	The dive time of a sighted marine mammal is a central consideration whenever mitigation measures depend on visual observation. For small cetaceans, the Commission has recommended a delay of at least 15 minutes because their dive times are shorter and generally occur within that timeframe. For some mysticetes and large cetaceans, the proposed 30-minute pause may be inadequate, sometimes markedly so. Sperm whales and beaked whales, in particular, may remain submerged for periods far exceeding 30 minutes. Blainville's beaked whales dive to considerable depths (> 1,400 m) and can remain submerged for nearly an hour (Baird et al. 2006, Tyack et al. 2006). In addition, observers may not detect marine mammals each time they return to the surface. Even under ideal conditions detection can be a problem, particularly for cryptic species such as beaked whales. Barlow (1999) found that "accounting for both submerged animals and animals that are otherwise missed by the observers in excellent survey conditions, only 23 percent of Cuvier's beaked whales and 45 percent of Mesoplodon beaked whales are estimated to be seen on ship surveys if they are located directly on	Dive behavior varies amongst species. As described in *the Dive Distribution and Group Size Parameters for Marine Species Occurring in Navy Training and Testing Areas in the North Atlantic and North Pacific Oceans* technical report, a 30 min. waiting period accounts for the dive capabilities typical of most species. Post-sighting activity recommencement wait periods longer than 30 min. would be impracticable to implement and would decrease realism of activities. For activities involving platforms restricted by fuel or other constraints (e.g., helicopters), the wait times have been adjusted based on operational need and practicability of implementation. A discussion of the effectiveness of each wait time is provided in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) for each activity. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	the survey trackline." Thus, depending on the species involved, short-term visual monitoring may not be adequate to confirm that a sighted marine mammal has left the mitigation zone. To address this problem, the Marine Mammal Commission again recommends that, after the sighting of one or more marine mammals within or about to enter a mitigation zone, the Navy cease the use of its sound sources (including explosive activities that do not use time-delay fusing devices) and not reinitiate them for periods at least as long as the maximum dive times of the species observed (if identified to species) or likely to be encountered (if species identification is uncertain).	measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. Lastly, species-specific identification of marine mammals is not a Lookout requirement. Therefore, a single activity-specific waiting time is needed between species.
MMC-21	For explosive activities that do involve time-delay fusing devices, the Navy proposes to use a 915-m mitigation zone, which is smaller than the 1,326-m zone currently used. The current zone was based on a 20-lb net explosive weight charge, a time delay to detonation of 10 minutes, an average swim speed for dolphins of 3 knots, and an added buffer to account for marine mammals that may be transiting at speeds faster than the average. The Commission has commented on this matter in numerous letters and continues to believe that the use of 3 knots as an average swim speed is inaccurate and inadequate, even with an added buffer to account for animals swimming faster than 3 knots. A simple calculation indicates that if a marine mammal swims at just 4 knots for the duration of the time-delay (10 minutes), the size of the mitigation zone would be inadequate, whether at 1,326 or 915 m. Importantly, many marine mammals are capable of swimming, and regularly do swim, much faster than 4 knots, especially for short periods. The average swim speed for bottlenose dolphins, for example, ranges from 2.6 to 8 knots (Lockyer and Morris 1987, Mate et al. 1995, Ridoux et al. 1997). In addition, pelagic dolphins swim faster than coastal species. The average swim speed for captive Pacific white-sided dolphins is 12.4 knots (Rohr and Fish 2004). Wild long-beaked common dolphins have been observed swimming at an average of 8.1 knots and captive individuals of that species have been observed swimming at an average of 13.0 knots (Rohr et al. 1998). In addition, the average swim speed for wild pantropical spotted dolphins is 6.9 knots (Au and Perryman 1982). Because many of the marine mammal species in the study area can and generally do swim faster than 3 knots, the mitigation zone proposed by the Navy is simply inadequate and poses a risk of additional injury and mortality, as was recently observed at the Silver Strand Training Complex. To address this concern, the Marine Mammal Commission recommends that the Navy adjust the size of the mitigation zone for mine neutralization events using the average	The principles of HSTT time-delay firing device mitigation are similar to those contained within the 2011 VACAPES Letter of Authorization. For time delay activities, the mitigation zone is 1,000 yd. for all charge sizes (5, 10, and 20 lb. charges) and for a maximum time delay of 10 min. The mitigation zone takes into account a portion of the distance that a marine mammal could potentially travel during the time delay. However, the mitigation zone was set at 1,000 yd. because that is the maximum distance that Lookouts in two small boats can realistically observe. The use of more than two boats for observation during this activity presents an unacceptable impact to readiness due to limited personnel resources. If a swim speed of 3 knots (101 yd./min.) (a nominal average for a delphinid in this area) is considered, the 1,000 yd. mitigation zone results in coverage of the potential range to mortality for all charges, including up to a 9 min. time delay. Furthermore, the mitigation zone covers the potential range to injury for 5 lb. charges, including up to a 6 min. time delay, and for 10 lb. and 20 lb. charges, including up to a 5 min. time delay. The 3 knot swim speed, therefore, was a consideration, but not the only determining factor in development of the time delay mitigation zones; therefore, considering different swim speeds would not result in a change to or expansion of the mitigation zone size for time delay activities. The Navy asserts that the 1,000-yard time delay zone is both practical and protective. The proposed HSTT mitigation zone covers the entire predicted maximum range to PTS as well as a portion of the estimated swim speed distance. Due to practicality of implementation and impact on the effectiveness of the military readiness activity, the proposed

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	swim speed of the fastest swimming marine mammal occurring in the area where time-delay firing devices would be used to detonate explosives.	mitigation zone represents the maximum distance that Lookouts on small boats can adequately observe given the number of personnel who will be involved. The use of more than two boats for observation during this activity presents an unacceptable impact on readiness due to limited personnel and equipment resources. Takes that cannot be avoided through mitigation are considered in the MMPA permitting process. Species-specific identification of marine mammals is not a Lookout requirement; therefore, a single activity-specific waiting time is needed between species.
U.S. Department of the Interior-01 (Written)	The EIS/OEIS should note that military operations and oil and gas operations have been conducted concurrently offshore in southern and south-central California for more than 50 years. During that period there have been no major incidents or accidents involving military and OCS oil and gas operations.	Thank you for providing this information. This information has been included in Section 4.3.2.1 (Proposed Outer Continental Shelf Oil and Gas Leasing Program 2012-2017) of the Final EIS/OEIS.
USDOI-02	Section 4.3.2 Oil and Natural Gas Exploration, Extraction, and Production The EIS/OEIS should note that BOEM and DOD have been working in a collaborative manner at both the planning and operational stages for OCS oil and gas activities to ensure that each organization can carry out its mission requirements in an effective and efficient manner. This collaboration has been ongoing for more than 30 years and is guided by the policies and procedures set forth in a 1983 Memorandum of Agreement (MOA) between DOI and DOD, and a 1987 DOD Directive (see attachment). BOEM recommends that the EIS/OEIS briefly describe the MOA and Directive, and that a copy of the MOA and Directive be included in an appendix of the document.	The Navy agrees that operations between the Bureau of Ocean Energy Management and the Navy have been conducted in a collaborative manner. The 1983 Memorandum of Agreement between DOI and DOD and the 1987 Directive outlines the policies and procedures for joint use of offshore areas for military activities and mineral exploration or other development purposes. The MOA serves to avoid potential conflicting activities and major incidents that could result in environmentally damaging incidents. Thank you for highlighting the collaborative manner in which the planning and operational stages for Off Continental Shelf oil and gas activities ensures that each organization may carry out its mission requirements in an effective and efficient manner. The Memorandum of Agreement (MOA) between DOI and DOD, and a 1987 DOD Directive are available on the HSTT EIS/OEIS public website.
USDOI-03	Section 4.3.2.1 Proposed Outer Continental Shelf Oil and Gas Leasing Program 2012-2017 The Draft EIS/OEIS states “Areas off the Pacific coast are not included in the 2012-2017 Outer Continental Shelf Oil and Gas Leasing Program proposed by the U.S. Department of the Interior Bureau of Ocean Energy Management based upon an agreement signed by the governors of California, Washington, and Oregon in 2006 (Bureau of Ocean Energy Management 2011).” The second part of that sentence -- “based upon an agreement signed by the governors of California, Washington, and Oregon in 2006” -- is inaccurate and should be deleted because the states’ agreement (documenting shared opposition to oil and gas development off their coasts) had no legal bearing or influence on the leasing program or on the Secretary’s decision about	The text in Section 4.3.2.1 (Proposed Outer Continental Shelf Oil and Gas Leasing Program 2012-2017) of the Final EIS/OEIS has been revised in accordance with this recommendation.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	which areas to exclude from the program.	
USDOI-04	In addition, the states' opposition was only one of many factors that the Secretary considered. Table 4.3-1 indicates that the Proposed OCS Oil and Gas Leasing Program 2012-2017 is to be "retained" for further consideration in the Cumulative Impacts Analysis. However, since the leasing program does not include any Pacific Region areas and it therefore poses no potential impact to the areas addressed in the EIS/OEIS, BOEM recommends that the table be revised to indicate that the leasing program has been "dismissed" from further analysis. BOEM also advises that the Final OCS Oil and Gas Leasing Program 2012-2017 is scheduled to become effective on July 1, 2012, and that references to the "Proposed" program in the Draft EIS/OEIS should be changed to "Final".	These changes have been incorporated in the Final EIS/OEIS.
USDOI-05	Section 4.3.3 Offshore Power Generation This section of the EIS/OEIS should include a sub-section describing the OCS Renewable Energy Program, and the text in Section 4.3.3.1 (Marine Hydrokinetic Projects) should be revised to ensure consistency between the two sub-sections.	A new section describing the OCS Renewable Energy Program has been added to the Final EIS/OEIS, now Section 4.3.3.1 (Outer Continental Shelf Renewable Energy Program).
USDOI-06	The EIS/OEIS should also note that the Energy Policy Act of 2005 amended the Outer Continental Shelf Lands Act, authorizing the Secretary of the Interior to issue leases on the OCS for activities that produce or support production, transportation, or transmission of energy from sources other than oil and gas. The Secretary delegated these responsibilities to BOEM, which issued regulations for OCS renewable energy activities in April 2009. Those regulations, which were updated in 2011 to address reorganizational changes, establish a program to grant leases, easements, and rights-of-way for orderly, safe, and environmentally responsible renewable energy development activities, such as the siting and construction of offshore wind-generating facilities on the OCS, as well as other forms of renewable energy, such as wave, current, and solar. The Energy Policy Act of 2005 mandated that the Secretary of the Interior coordinate with affected State and local governments and federal agencies in developing the program and issuing leases for the development of renewable energy resources. BOEM has met this statutory requirement by establishing task forces with coastal states that have expressed interest in commercial development of OCS renewable energy resources.	This information does not contribute to the analysis of cumulative impacts and has not been added.
USDOI-07	1. The US Fish and Wildlife Service (Service) recommends that the following language be clarified or corrected in the final EIS/OEIS where it is found though-out the document: Under the ESA, [a specific activity] occurring at [location] under the No Action Alternative, Alternative 1, or Alternative 2 may affect, but are not likely to adversely affect, ESA-listed [specific species]. An assessment of effects is not made in the ESA (Endangered Species Act) per se, and while this is likely not the intent of these statements, as written they imply that the ESA is the reference document in which such determinations were made.	Changed throughout to "pursuant to the ESA…"

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
USDOI-08	2. Effects Determinations pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.) The document concludes that all proposed training activities under all three alternatives (No Action, Alternative 1 and Alternative 2) may affect, but are not likely to adversely affect, any federally-listed species considered in the document. We recommend that an effects determination not be made solely on the basis of the information provided in the draft EIS/OEIS. Impacts to federally-listed species from training activities considered under the No Action Alternative in this document have been the subject of previous formal consultations with the US Fish and Wildlife Service (e.g., Biological Opinion on the U.S. Navy's Silver Strand Training Complex Operations, Naval Base, Coronado, San Diego, California; issued July 10, 2010) and some of the actions proposed under Alternatives 1 and/or 2 may have been, or will be, the subject of consultation as well. Hence, the statement is incorrect in some cases. The question of whether a proposed action has been sufficiently addressed under NEPA differs from an "effects determination" pursuant to section 7 of the Act.	The Navy has concluded formal consultation with the U.S. Fish and Wildlife Service (USFWS) and NMFS, in which previous formal consultations were also considered.
USDOI-09	3. Sediment Quality - Chapter 3.1-14 We recommend that the final EIS/OEIS provide more detailed information regarding sediment quality in San Diego Bay, and if possible, more current information (e.g., the reference documents for section 3.1.2.2.2 were dated 2002 and 2003). For example, could a figure analogous to the figure provided for the Hawaiian Islands (Figure 3.1-1) and a table similar to Tables 3.1-3 and 3.1-4, which provide information on sediment quality within the Hawaiian Islands and San Clemente Island, be provided for San Diego Bay? If there is more current, site-specific information regarding sediment quality, it would be helpful to have it available in the final EIS/OEIS. We recognize the scale and scope of the activities discussed in the draft EIS/OEIS may be such that more fine-scale information about sediment quality is not relevant to the proposed actions. Although we agree with the general conclusion that sediments in San Diego Bay are substantially free of chemical contamination, the broad conclusion seems counter to recent efforts to clean sediments at specific sites; e.g., La Playa Cove, 10th Street Marine Terminal. Does this EIS cover changes to berthing or hull maintenance? If so, the number of ships berthed within the Bay, and estimated contribution of these ships to contaminant load within different areas of the Bay, needs discussion. If a separate EIS evaluates the environmental impacts of ship berthing in San Diego Bay, reference to the document should be provided.	The information presented in the Draft and Final EIS/OEIS regarding sediment quality in San Diego Bay is the most current and relevant information. The Proposed Action does not include hull maintenance.
USDOI-10	4. Inclusion of Other Species We are providing you with a link to the Listing Workplan, a multi-year listing work plan describing the process to review and address more than 250 species listed on the 2010 Candidate Notice of Review to determine if they should be added to the Federal Lists of Endangered and Threatened Wildlife and Plants. We recommend you review this	Thank you for providing this information. These species were all considered in the development of the Draft EIS/OEIS.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	information to determine whether any candidate species within the Study Area warrant further review in the final EIS/OEIS. http://www.fws.gov/endangered/improving_ESA/listing_workplan.html	
USDOI-11	Page 3.6.63: The document addresses the issue of plastic ingestion by seabirds, and discusses the significance of plastic ingestion and seabird survival. However, the full impact of plastic ingestion on the population may be more important in the young rather than mature birds. Fry et al. (1987) showed that ingestion of plastic debris by Laysan albatrosses and wedge-tailed shearwaters chicks in the Hawaiian Islands resulted in a significant percentage of chicks with proventricular impactions or ulcerative lesions. The U.S. Geological Survey suggests that the Final EIS/OEIS include the Fry et al. (1987) description of the potential impact of plastic ingestion on chicks. The reference is: Fry, D. M.; Fefer, S. I.; Sileo, L. 1987. Ingestion of plastic debris by Laysan albatrosses and wedge-tailed shearwaters in the Hawaiian Islands. Marine Pollution Bulletin 18(6):339-343.	The information collected by Fry et al. (1987) has been included in the overall description of potential consequences of plastics ingestion. However, the overall risk to birds, and non-fledging chicks, remains low, as the distribution of plastics associated with training activities is less than 1 piece per square nautical mile. Further, the highest density of ingestible materials would be within the SOCAL Range Portion of the Study area, which does not overlap the areas utilized by foraging adults during the pre-fledging period of chicks.
U.S. Geological Survey (Written)	Thank you for forwarding the subject Draft EIS/OEIS for review and comment by the staff of the U.S. Geological Survey Pacific Islands Water Science Center. We regret however, that due to prior commitments and lack of available staff time, we are unable to review this document. We appreciate the opportunity to participate in the review process.	No response required.
Comments by State and Local Agencies and Elected Officials		
California Coastal Commission-01 (Written)	Thank you for the opportunity to comment on this DEIS/OEIS ("DEIS"). We will focus our comments on the implications for California's coastal species and populations of marine species which spend portions or all of their life cycle within the California coastal zone, impacts to either of which we believe clearly trigger the requirements of Section 307 of the federal Coastal Zone Management Act. We appreciate that the DEIS indicates the Navy's intent to comply with the Coastal Zone Management Act (CZMA), although the document could be clearer on this subject. The procedural discussion on pages 6-4 and 6-5 of the DEIS correctly spells out the applicable CZMA requirements; however the document does not clearly indicate whether the Navy intends to submit a consistency determination to the California Coastal Commission for the activities proposed in California's offshore waters. During the Commission's most recent two reviews of Navy SOCAL testing and training, Consistency Determinations CD-086-06 and CD-049-08, several differences of opinion between the Navy and the Commission arose concerning which activities were considered to involve effects on coastal zone resources, what thresholds should be relied upon in the determination of effects to marine mammals, and, most importantly, what minimization and mitigation measures should be employed to reduce such impacts. Modifications the Commission requested the Navy to consider during the most recent of these reviews (CD-049-08), are attached as Appendix A. Given	The Navy submitted a consistency determination to the California Coastal Commission for the entirety of the Southern California Training and Testing activities. Subsequent correspondence between the California Coastal Commission and the Navy is included in Appendix C (Agency Correspondence).

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	our past disagreements involving the extent to which activities affecting marine mammals in California ocean waters conducted outside the coastal zone (but affecting coastal zone resources, in our opinion), we would appreciate a clear statement that the Navy will be submitting a consistency determination for the entirety of the Southern California Training and Testing activities. We believe the DEIS only underscores the need for such a complete submittal, in that it contains far more expansive estimates (than contained in previous Navy analyses) of the potential for existing levels of training and testing activities to result in harassment of marine mammals (because the previous Navy analyses relied on higher decibel received levels for impact thresholds). Under the Navy's new analysis, harassment (as defined under the Marine Mammal Protection Act (MMPA) of marine mammals under existing, or "baseline," conditions, would be on the order of 10 times more extensive than previously acknowledged, with potentially up to 650,000 California marine mammals affected annually for baseline conditions (with the understanding that these numbers represent "pre-mitigation measure" estimates). In the DEIS the Navy further proposes significant increases to levels of training that would approximately triple the numbers of potential MMPA -defined harassments offshore California. While the harassment numbers have been based on impact definitions contained in the MMPA and Endangered Species Act, the extremely large numbers estimated provide indisputable evidence that the proposed activities can reasonably be considered to be resulting in effects on California's coastal zone resources, and, therefore, that the activities must be conducted in a manner consistent to the maximum extent practicable with the marine resource protection policy of the Coastal Act. This policy provides that: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes. To assist us in our analysis of the Navy's consistency determination for these activities, we request that the Navy provide the following information:	
CCC-02	1) A breakdown between California and Hawaii totals for numbers of estimated behavioral and Levels A and B harassments, and mortality, that separates the totals for California from those for Hawaii for the totals presented in the "boxed" discussions such as the one on page 3.4-169, which reads: Impact of sonar and other acoustic sources during training activities under Alternative 1: • May expose marine mammals up to 2,524,784 times annually to sound levels that would be considered Level 8 harassment, as defined by the MMPA • May expose marine mammals up to 441 times annually to sound levels that would be considered Level A harassment, as defined by the MMPA • May expose up to 2 beaked whales annually to sound levels that may elicit stranding	The consistency determination submitted to the California Coastal Commission included the breakdown as requested. Within the Draft and Final EIS/OEIS, the stock of each species indicates if the harassment was predicted for activities in the Hawaii or Southern California portion of the Study Area. For example, any Hawaii stock indicates a potential harassment from activities in Hawaii. All others are attributable to Southern California.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	and subsequent serious injury or mortality Under the ESA, the use of sonar and other acoustic sources during training activities as described in Alternative 1: • May affect, and is likely to adversely affect the humpback whale, sei whale, fin whale, blue whale, sperm whale, Hawaiian monk seal, Guadalupe fur seal, and the Hawaii insular stock of false killer whale • Would have no effect on Hawaiian monk seal critical habitat	
CCC-03	2) A summary of the conclusions the Navy has drawn from its "After-Action Reports" compiled for the past 5 years of Navy SOCAL testing and training.	"The Navy does not produce "After-Action Reports" since the beginning of NMFS' MMPA authorization in January 2009. Instead, the Navy provides NMFS Office of Protected Resources an annual summary of all SOCAL monitoring by 1 October of each year. Publically available copies of reports from 2009, 2010, 2011, and 2012 are available on NMFS's website: http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications Alternatively, the Navy has also sponsored establishment of a new public monitoring website at: http://www.navymarinespeciesmonitoring.us/ SOCAL specific reports can be downloaded at: http://www.navymarinespeciesmonitoring.us/reading-room/ (under "Southern California Range Complex") As required by the 2009 NMFS Final Rule for U.S. Navy Training in the Southern California Range Complex, the Navy submits an annual SOCAL Range Complex Monitoring Plan Report. The Navy's 2012 annual monitoring report to NMFS has just been delivered to NMFS for their internal review. Finally, a cumulative summary of annual report data acquisition and conclusions will be provided to NMFS in a pending report due at the end of November 2012. NMFS will conduct a 90-day review of that report before the Navy can make it public."
CCC-04	3) A follow-up to the discussion on page 3.4-136 which indicates that, while distress or unusual marine mammal behavior was not observed during past exercises: "Results of monitoring in HSTT are preliminary and data analysis is underway to determine if there is evidence of more subtle behavioral effects present in the data collected to date." [Emphasis added]	The latest information available on behavioral effects can be found on NMFS's website: http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications.
CCC-05	4) Any relevant data and findings from NOAA's Marine Mammal Underwater Sound Research program, in particular where this research looked into effects occurring during Navy SOCAL testing and training activities, and a discussion of the degree to which NOAA's research program intends to continue to coordinate with the Navy and monitor	The California Coastal Commission would have to ask NOAA for this information, but the Navy's monitoring information can be found at http://www.navymarinespeciesmonitoring.us/reading-room/

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	marine mammal reactions during future Navy training and testing activities.	
CCC-06	5) A clear explanation as to the reasons the Navy is proposing to increase its activities to the degree that would represent an approximately three-fold increase in California marine mammal harassment levels over current training (this increase is based on a cursory study of Tables 3.4-13 and 3.4-14, which provide individual species breakdown of effects between California and Hawaii). In looking at Tables 3.8-1 through 3.8-4, which list baseline and proposed Alternative 1 and 2 levels of activities, we are unable to discern why, or during which activities, such extensive increased levels of harassment would be expected to occur at the levels depicted in Tables 3.4-13 and 3.4-14.	The increase in harassment levels is due to several contributing factors that make it inappropriate to compare takes from the 2008 SOCAL EIS/OEIS: • An increase in training and testing activities and the inclusion of more activities and sources, such as pierside sonar testing, to meet emerging requirements • The 2008 EIS/OEIS included very little of the existing testing that is now included in this EIS/OEIS, much of which was covered under other environmental analyses. • This EIS/OEIS now includes a number of previously unanalyzed sound sources • Combined geographical areas (inclusion of both SOCAL and Silver Strand Training Complexes, and areas not previously analyzed such as San Diego Bay) • Included activities conducted along a transit corridor between SOCAL and Hawaii that account for additional potential harassments • Updated marine mammal density information that reflects current species abundance • New acoustic effects model that provides a more accurate prediction of animal movement and therefore, potential exposures • New acoustic threshold criteria based on the best available science that is more protective of marine mammals, extends the ranges to effects of sound sources, and results in higher numbers of predicted level A takes.
CCC-07	6) Information on the feasibility of debris removal. Tables 3.3-5 through 3.3-7 depict extremely large quantities of heavy metals, materials from munitions and explosives, and other debris that have been and will continue to be expended annually from the existing and proposed testing and training activities, about 85% of which appear to be in California offshore waters. As we have requested from the Navy in numerous past reviews of various proposals, we would appreciate an analysis of whether any of these materials could be retrieved and removed from the marine environment. For example, we note that over 20,000 parachutes are currently being expended in California waters each year (and this number is proposed to increase by over 50%, to approximately 37,000 under Alternative 2). Has the Navy studied how long it takes for these parachutes to break down in deep ocean conditions? Is it possible to retrieve some of these parachutes? We would appreciate a discussion of the feasibility of removal of these and other debris materials listed in these tables, as well as an analysis of their persistence in the marine environment if they cannot be removed.	While the Navy has not conducted specific studies on the time required for expended materials such as parachutes to decompose in the ocean, the information regarding potential effects of these materials to marine resources is included in Chapter 3 (e.g. for entanglement with Sea Turtles in Section 3.5.3.4.2, Impacts from Parachutes) of the EIS/OEIS. Of note, the Navy continues to look for ways to lessen its environmental impacts, including research into biodegradable parachutes, for example.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
CCC-08	Finally, we wish to commend the Navy for its current analytical framework, which we believe is more realistic than previous Navy analyses have acknowledged, and which accepts the possibility that greater numbers of marine mammals and other species may be occurring during Navy training and testing activities, in particular those activities involving mid-frequency sonar use. However we are disappointed that the proposed avoidance, minimization, and mitigation measures have, for the most part, remain relatively unchanged compared to those included in previous years' training and testing activities. As we pointed out that during our above-cited reviews of past Navy SOCAL training and testing activities, clearly any efforts the Navy adopts to further avoid or minimize loud mid-frequency sonar use in areas or seasons where significant concentrations of marine mammals are present, would also inherently benefit the Navy's testing and training itself, by reducing delays and stoppages necessitated by the presence of marine species in the mitigation zones. Accordingly, we again urge the Navy to consider incorporating measures such as those listed in Appendix A, including, to the maximum extent feasible, avoiding testing and training involving loud underwater noise generation in areas (and/or seasons) with significant concentrations of marine mammals, adoption of larger mitigation safety zones, reduced power during periods of reduced visibility and when surface ducting is present, increased monitoring during choke point exercises, and expanded baseline monitoring. Thank you for this opportunity to comment on this important military program EIS/OEIS. If you have any questions about these information requests, or about preparation of a consistency determination, please feel free to contact me at (415) 904-5289.	Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures that will mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas. The Navy used the best available data (including data on animal density, distribution, and occurrence) to support its impact analyses in the DEIS/OEIS. Variability in animal presence within relatively small ocean sub-areas is often strongly correlated with daily, weekly, seasonal, and even decadal changes in prey availability, with prey availability being driven by changes in both local and basin-wide oceanographic conditions. Any specific area of high animal density at a given time may have low animal density the following day, week, or year, depending on the biotic and abiotic factors affecting the prey distribution. Blue whales, for example, "integrate food resources (i.e., search for food) over a large area due to the dietary needs of such a large animal" (D. Crull, UCSC, personal communication 2007). Operationally, there is some variability in where Navy major exercises may occur within the SOCAL Range Complex. Location is determined by individual strike group needs. Furthermore, exercises are relatively short in duration (hours to days) and separated in time, so no ocean area within SOCAL OPAREAs is subject to continuous sonar use. Finally, it must be acknowledged that ASW activities have been conducted without incident for decades in SOCAL OPAREAs. In fact, many populations of Endangered Species Act (ESA) species and non-ESA species alike have been increasing in SOCAL OPAREAs over the last several decades. Given the natural variation of marine mammal location over time within the SOCAL OPAREAs, operational variability of Navy ASW operations, and the absence of scientific information demonstrating broad-scale impacts that are either injurious or of significant biological impact to marine mammals, there is little relative risk to marine mammal populations from ASW training exercises.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
California Office of Historic Preservation (Written)	Pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act, the United States Navy (Navy) is requesting my concurrence with a finding of No Historic Properties Affected. The Navy plans to renew training and testing activities in the waters off of Southern California, Hawaii, and the Open Ocean Transit corridor between these two regions. The majority of activities off of California will occur within the Southern California Operating Area (OPAREA), including the waters surrounding San Clemente Island, boat lanes and anchorages offshore of the Silver Strand Training Complex (SSTC), and the bayside training areas within San Diego Bay. Activities specific to this undertaking include gunnery and explosive exercises as well as the use and maintenance of sonar equipment. The project area also includes select pier side locations within San Diego Bay where Navy surface ship and sonar maintenance testing occurs. The Navy defines the Area of Potential Effects (APE) for this activity as the open ocean areas in the Southern California Range Complex with the OPAREA, and boat lanes and anchorages offshore of the SSTC, including the bayside training areas within San Diego Bay. In addition to your letter, you have provided maps and a CDR containing environmental studies undertaken in the project area. Training and testing activities are consistent with actions currently conducted in the above-referenced areas. For example, artillery and explosive exercises will take place within the Open Ocean or near-shore areas, away from where there are any known cultural or historical resources. Pile driving for elevated causeway training at SSTC will subject near shore sediments to vibration, disruption, and compaction at SSTC and will occur only in the Oceanside Boat Lanes 1-10 and in the Bayside Bravo Training Area. Proposed activities area consistent with activities currently conducted in these areas. Having reviewed your submittal, I concur with your Finding of Effect. I also agree that you have adequately determined the undertaking's APE. Please be advised that in the event of a change in project description or an inadvertent discovery, you may have additional responsibilities under 36 CFR Part 800.	Thank you for participating in the NEPA process.
California State Lands Commission-01 (Written)	After review of the information provided and in-house records, CSLC staff has determined that the proposed project will be located within: • Ungranted sovereign lands of the Pacific Ocean and under the leasing jurisdiction of the CSLC. • Lands granted to Orange County pursuant to Chapter 321, Statutes of 1961, with minerals reserved to the State. • Lands granted to the city of Oceanside pursuant to Chapter 846, Statutes of 1979, with minerals reserved to the State. • Lands granted to the city of San Diego pursuant to Chapter 937, Statutes of 1931, with minerals reserved to the State. • Lands granted to the city of San Diego pursuant to Chapter 688, Statutes of 1933, with mineral reserved to the State.	No dredging activities are part of the Proposed Action.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	• Lands granted to the city of San Diego pursuant to Chapter 2139, Statutes of 1963, with minerals reserved to the State. • Lands granted to the city of San Diego pursuant to Chapter 2140, Statutes of 1963, with minerals reserved to the State. • Lands granted to the U.S.A. pursuant to Chapter 89, Statutes of 1937, with minerals reserved to the State. • Lands granted to the city of Avalon pursuant to Chapter 303, Statutes of 1943, with minerals reserved to the State HSTT activities proposed in areas of ungranted sovereign lands under the leasing jurisdiction of the CSLC may require a lease from the CSLC. Additionally, any dredging activities on ungranted sovereign lands, or granted lands for which minerals were reserved for the State, would require a dredging lease from the CSLC. The CSLC's surface lease application can be found at www.slc.ca.qov. Please contact Michelle Andersen, Public Land Manager, at the number listed at the end of this letter regarding any questions regarding leasing.	
CSLC-02	Additionally, the EIS/OEIS indicates on page 2-40 that training and testing activities may include Synthetic Aperture Sonar, "in which active acoustic signals are post-processed to form high-resolution images of the seafloor." Please be aware that geophysical and geological surveys conducted in State waters require a geophysical survey permit from the CSLC pursuant to California Public Resources Code section 6826. For more information on these survey permits, please contact Richard Greenwood at the contact information listed at the end of this letter.	The Navy is not proposing to conduct geophysical or geological surveys under the Proposed Action of this EIS/OEIS.
CSLC-03	Although the EIS/OEIS specifies that certain activities, such as anti-submarine warfare training events, would occur further offshore and outside of State jurisdictional waters, and that certain activities, such as mine-detection sonar, would generally occur in shallower waters, the EIS/OEIS lacks an overall, broader discussion or table, separately identifying the training and testing activities that might occur in state waters and, therefore, potentially affect California's public trust resources. Although CSLC staff understands that the particular location and frequency of the various Project activities at any given time change according to the Navy's needs, CSLC staff requests that the EIS/OEIS provide further information on activities that may occur in California state waters and, if available, an estimate of the frequency of particular activities in State waters. Such a discussion would help CSLC staff with leasing and management activities in the Study Area, both with the Navy and other lease applicants or lessees, and would be useful in determining potential use conflicts with other ocean users in the Study Area in the future.	The flexibility required by the Navy in conducting realistic training means that some activities' locations require broad definitions. To the level of detail that the activities can be predicted, they are described in Chapter 2 (Description of Proposed Action and Alternatives) of the EIS/OEIS, and specifically in Tables 2.8-1 through 2.8-5. Further, the activities described in this EIS/OEIS are similar in type, frequency, and location as those conducted for decades in the Southern California area.
CSLC-04	The EIS/OEIS should also mention that the title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the CSLC. The	The Draft EIS/OEIS included language regarding the Abandoned Shipwreck Act in Section 3.0.1.1 (Federal Statutes). This text has been revised in the Final EIS/OEIS to include language that the Act

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	recovery of objects from any submerged archaeological site or shipwreck may require a salvage permit under Public Resources Code section 6309. On statutorily granted tide and submerged lands, a permit may be issued only after consultation with the local grantee and a determination by the CSLC that the proposed salvage operation is not inconsistent with the purposes of the legislative grant. CSLC staff requests that the Navy consult with Senior Staff Counsel Pam Griggs at the contact information noted at the end of this letter, should any cultural resources be discovered during Project activities.	stipulates title to shipwrecks that meet the criteria for inclusion in the National Register of Historic Places will be transferred to the appropriate State.
CSLC-05	Thank you for the opportunity to comment on the EIS/OEIS for the Project. Because part of the proposed Project involves use of State sovereign lands and may require issuance of a lease or permit, the CSLC would need to rely on an environmental document that meets CEQA requirements. The CSLC will review the final document and determine whether it has met the requirements identified in this letter for use in lieu of a separate EIR. If it does not, the CSLC would be required to prepare and circulate a separate environmental document that complies with CEQA prior to taking action on approval of a lease or permit.	Thank you for your comment. The Navy looks forward to continuing the good relationship and communication with the California State Lands Commission.
City of Coronado, Community Development-01	Section 2.7.1 Proposed Adjustments to Baseline Training Activities p. 2-64: This section describes the various adjustments but with the exception of two activities, does not indicate where these adjusted training activities will occur. What training activities of those listed will occur within the SSTC?	Section 2.7.1 (Proposed Adjustments to Baseline Training Activities) is a summary of changes that are more fully described in Table 2.8-1, where the location for each activity is listed. As shown in Table 2.8-1, the changes from current activity (the No Action Alternative) to proposed activities (Alternatives 1 and 2) within SSTC would be 1) the increase in underwater detonations in the SSTC Boat Lanes from 408 annually to 414 (p. 2-92), 2) an increase in the annual number of airborne mine countermeasure – mine detection activities—in the Boat Lanes from 248 to 372 (p. 2-93), 3) an increase in the number of mine neutralization – remotely operated vehicle activities from 208 annually to 312 (p. 2-04), and 4) a decrease in the number of annual marine mammal system activities from 208 to 175 (p. 2-94).
Coronado-02	Section 2.7.2 Proposed Adjustments to Baseline Testing Activities p. 2-67: Similar comment as above. This section describes the adjustments to the baseline testing activities; however does not identify the areas where this would occur. What components of the SSTC testing activities would be adjusted? Please clarify the acronym OPAREA that is referenced several times in Section 2.7.2 above. Does it stand for Ocean Operating Areas Outside the Bounds of Existing Range Complexes?	Section 2.7.2 (Proposed Adjustments to Baseline Testing Activities) is a summary of changes that are more fully described in Tables 2.8-2 through 2.8-5, where the location for each testing activity is listed. No testing activities are proposed to be conducted at SSTC. As described on p. 2-3 of the EIS/OEIS, an OPAREA stands for "Operating Area." The full definition and two examples are included on p. 2-3.
Coronado-03	Proposed Platforms and Systems p. 2-68. Aircraft F-35 Joint Strike Fighter: The document notes that the F-35 Joint Strike Fighter Lightning II will complement the Navy's F/A-18E/F and the F-35 is expected to make up about one-third of Navy's strike inventory by 2020. It notes the F-35 will operate similarly to the	The purpose of the HSTT EIS/OEIS is to analyze only the training and testing activities associated with the F-35 aircraft and other new systems and platforms. Homebasing actions for the F-35C are addressed in the EIS for U.S. Navy F-35C West Coast Homebasing.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	aircraft it replaces or complements, and that no new activities will result from the introduction of the F-35. Where will the F-35 be home-based? Will it be at NASNI? What type of supportive facilities will be required for general maintenance/service/housing of the replacement F-35's? What about personnel changes associated with the F-35? How do the noise levels generated by the aircraft compare? EA-18G Airborne Electronic Attack Aircraft: This aircraft will replace the EA-6Bs and operate in similar training areas and capacities. The same question as noted for the strike fighter applies to the EA-18G. Where will these be home-based? What types of new supportive facilities will be required, personnel, etc? How much noise does this aircraft generate in comparison to existing?	The draft EIS was released for public review in February 2013 and is available for review at: http://www.navyf35cwestcoasteis.com. Navy prepared an EA in November 2005 addressing the replacement of the EA-6B by the EA18-G in 2005 and signed a Finding of No Significant Impact on July 19, 2005. The decision was to homebase all EA-18G aircraft at NAS Whidbey Island, WA. However, these aircraft will conduct training in the HSTT Study Area.
Coronado-04	Proposed Platforms p. 2-68. Ships The document indicates the CVN-21 Program is designed to replace the Nimitz class carriers with the first carrier CVN 78 expected in 2015. Where will this new carrier be home-based, at NASNI? What type of new supportive/maintenance facilities will be required? How frequently is maintenance required? How many new personnel are associated with this carrier?	The purpose of the HSTT EIS/OEIS is to analyze only the training and testing activities associated with the CVN-21 and other new systems and platforms. All homeporting questions raised in the comment are not associated with this study, and would be addressed in separate Navy homeporting environmental planning documentation.
Coronado-05	Proposed Platforms p. 2-71 Missiles/Rockets/Bombs The document indicates Guided Rocket Systems will be introduced and used on the MH-60 helicopters. The MH-60's were recently relocated to NASNI. Where will this new training take place with the rocket systems and MH-60's and how many events over a month and year's period are expected to occur and what is the decibel level? Kinetic Energy Weapons will use electromagnetic kinetic energy weapons to accelerate projectiles to supersonic velocities. It notes these weapons will be operated from ships, firing projectiles toward land targets. What land area would be recipient of firing projectiles? Would this occur within the SSTC? It is not clearly identified where many of the other platforms will occur. Clarify which activities would occur within the SSTC.	The annual number and location of all training activities are included, along with any ordnance expended, in Table 2.8-1, beginning on p. 2-77 of the Draft EIS/OEIS. Regarding the rocket systems, all missile and rocket firings would occur well offshore, beyond sight and hearing of Southern California. The only use of kinetic energy weapons would be testing at the Pacific Missile Range Facility in the Hawaii Range Complex. Neither the kinetic energy weapons testing, nor any missile or rocket firings would occur in or near SSTC.
Coronado-06	Proposed New Activities: p. 2-73 Where will the surface-to-surface missile exercises occur? What will be the frequency of these exercises and how much noise will be generated?	The annual number and location of all training activities are included, along with any ordnance expended, in Table 2.8-1, beginning on p. 2-77 of the Draft EIS/OEIS.
Coronado-07	Alternative 2 p. 2-74 Alternative 2 is the preferred alternative and identifies the establishment of new range capabilities as well as adjustments to type and tempo of training and testing and establishment of additional locations to conduct activities between the range complexes. Please clarify what type and quantity of "adjustments" will be made to type and tempo of training and testing as it relates to SSTC. Will the training be intensified beyond what was addressed in the EIS completed for the SSTC? The EIS for the SSTC indicated there would not be measurable increases in personnel or associated traffic; however, the City disagreed. Again, there appears to be an	The annual number and location of all training activities are included, along with any ordnance expended, in Table 2.8-1, beginning on p. 2-76 of the Draft EIS/OEIS. As shown in Table 2.8-1, no activities located at SSTC will increase over those analyzed in the SSTC EIS.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	incremental expansion of activities, noise, personnel and associated traffic within Coronado due to expanded/intensified operations; notably, p. 2-75 indicates a 10% increase; however, these impacts are not being analyzed nor is any mitigation proposed.	
Coronado-08	Table 2.8-1 Baseline and Proposed Training Activities: There are significant increases in activity levels with the preferred alternative 2. Revise/clarify the table to clearly illustrate where the activities within the SOCAL area will occur. Please clarify volumes/activities within the SSTC.	The activities listed in Table 2.8-1 are described both by location, and by number of annual events. Those occurring at SSTC clearly state SSTC under "Location" in the table. If an activity does not specifically list SSTC, then it would not occur there.
State of Hawaii, Department of Business, Economic Development, and Tourism, Office of Planning	It is the responsibility of the Department of the Navy, pursuant to 15 CFR 930, Subpart C, to demonstrate to the Hawaii CZM Program that the activities proposed in the HSTT EIS/OEIS remain consistent with the activities outlined and conclusions made in the 2008 Hawaii Range Complex EIS/OEIS CZMA coastal consistency determination. The 2009 Navy De Minimis Activities List is not applicable to activities that are subject to the EIS level of NEPA compliance, such as the activities included in the HSTT EIS/OEIS. We will provide the Navy with guidance and assistance for consistency determinations in accordance with 15 CFR 930.34(d), if requested. In order for the Hawaii CZM Program to provide consistency guidance, the Navy must identify and compare the activities proposed in the HSTT EIS/OEIS with the activities included in the 2008 Hawaii Range Complex EIS/OEIS CZMA coastal consistency determination. Specifically, activities that must be identified include: activities that are new and/or different from those activities reviewed in 2008; activities that are a continuation of the activities reviewed in 2008; and activities that are a continuation of the activities reviewed in 2008, but have changed in scope, size, operation, scale, intensity, and/or frequency. This information is necessary to identify the applicable Hawaii CZM Program enforceable policies. Continuity of consistency from the Navy's 2008 federal consistency determination cannot be presumed for the HSTT activities. In order for us to determine whether the 2008 HRC CZMA consistency determination can be applied to the HSTT activities, the Navy must provide a comparative CZMA consistency analysis between the 2008 HRC activities and the HSTT activities. It is our position that a new CZMA consistency determination is required for HSTT activities, as explained in response no. 3, below. The 2009 Navy CZMA De Minimis Activities List, which was developed cooperatively by the Hawaii CZM Program and the Department of the Navy, and approved by the Office of Planning on July 9, 2009, is not applicable to activities that are subject to the EIS level of NEPA compliance. EIS level activities, such as the activities included in the HSTT EIS/OEIS, are not de minimis activities. Therefore, we disagree with the application of the Navy CZMA De Minimis Activities List to HSTT activities. We disagree with the Navy's position that, "no further CZMA federal consistency review is required." A CZMA consistency determination is required for all HSTT activities that were not previously reviewed by the Hawaii CZM Program. The HSTT EIS/OEIS by itself does not fulfill the content requirements of a consistency determination. The required	The Navy submitted a Consistency Determination to the State of Hawaii for the entirety of the Hawaii Training and Testing activities. Subsequent correspondence between the Hawaii Office of Planning and the Navy is included in Appendix C (Agency Correspondence).

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	content of a consistency determination is identified in 15 CFR 930.39. The CZM consistency determination must also include the activities that were reviewed m the 2008 HRC EIS/OEIS CZMA coastal consistency determination, but have either changed, will result in a cumulative impact with the new HSTT activities, or were issued consistency objections that remain unresolved. In addition, information in the HSTT EIS/OEIS that was not available to us in 2008 will cause us to reevaluate previously reviewed activities. For example, the 2008 Hawaii Range Complex Final EIS/OEIS, Section 4.1.2.3 Environmental Consequences- Sea Turtles, indicates that activities proposed under Alternatives 1 and 2, i.e., sonar use and underwater detonations, would not affect sea turtles, and for compliance under ESA the "Navy finds that these activities are not likely to affect green, olive ridley, loggerhead, hawksbill, or leatherback sea turtles." However, the HSTT Draft EIS/OEIS, Section 3.5 Sea Turtles, indicates that activities involving acoustic stressors, physical disturbances, and strike stressors, "may affect and are likely to adversely affect green, hawksbill, olive ridley, leatherback, and loggerhead sea turtles." The substantial difference in reported anticipated impacts to sea turtles, which are State of Hawaii coastal resources, warrants supplemental federal consistency review pursuant to 15 CFR Section 930.46. There is also new evidence that Navy SINKEX exercises can cause spikes in PCB levels in fish (Honolulu Star Advertiser, March 5, 2012). This new information will cause us to reevaluate our previous consistency concurrence for SINKEX. Please note that the Office of the Planning is the authorized lead agency for the Hawaii CZM Program. All future correspondence regarding the Hawaii CZM Program should be sent directly to the Office of Planning at the above mailing address. We are confident that we can arrive at a solution that allows the Navy to carry out its mission while ensuring consistency with the CZMA, both of which are important to the public health and safety of the people of the United States. If you have any questions, please call John Nakagawa of our CZM Program at 587-2878.	
State of Hawaii, Department of Health, Environmental Planning Office	The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter, dated May 3, 2012. Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have no comments at this time, but reserve the right to future comments. We strongly recommend that you review all of the Standard Comments on our website;. www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to. The United States Environmental Protection Agency (EPA) provides a wealth of information on their website including strategies to help protect our natural environment and build sustainable communities at: http://water.epa.gov/ infrastructure/sustain/ . The DOH encourages State and county planning departments, developers, planners, engineers and other interested parties to apply these strategies and environment	Thank you for participating in the NEPA process.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	principles whenever they plan or review new developments or redevelopments projects. We also ask you to share this information with others to increase community awareness on healthy, sustainable community design. If there are any questions about these comments please contact me.	
State of Hawaii, Department of Land and Natural Resources-01	The Department of Land and Natural Resources (Department) has reviewed the Navy's Hawaii-Southern California Training and Testing Activities Draft Environmental Impact Statement/Overseas Environmental Impact Statement (DEIS/OEIS) made available in May, 2012. We understand that this DEIS/OEIS supports a request for a new letter of authorization for incidental take of marine mammals for January 2014 through December 2018. We also understand that a Marine Mammal Protection Act letter of authorization for the take of marine mammals may require the National Marine Fisheries Service to support additional mitigation measures or monitoring beyond those contained in the DEIS/OEIS. The Department has concerns that the DEIS/OEIS does not acknowledge the scientific documentation of strandings of marine mammals that may be associated with the types of activities proposed by the Navy. For example, the work of Wang & Yang (2006) indicating pygmy killer whales stranded in Taiwan as a result of active sonar & seismic operations is dismissed as "not supported by the data available" on page 3.4-45. In addition, there is no mention of the concurrent and unusual melon-headed whale activity in Hanalei Bay, Kaua'i and Sasanhaya Bay, Rota, Northern Mariana Islands in 2004. These "strandings" are both included in the report "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" (April 2012) associated with the Atlantic Fleet Training and Testing EIS (http://aftteis.com/Portals/4/aftteis/Supporting%20Technical%20 Documents/Marine%20Mammal_Stranding_Report_ v02.pdf). We suggest that the Hawaii-Southern California DEIS/OEIS include details of the Hanalei Bay incident and that it acknowledge the heightened risk for certain species documented to strand during Naval activities. In addition to melon-headed whales, beaked whales are considered to be especially vulnerable to injury and death associated with Navy sonar (five beaked whale stranding events with potential links to Navy sonar activity are described in the Atlantic EIS cited above). Although such strandings of beaked whales associated with Naval exercises have not been seen in Hawai'i, the science indicates that animals affected by Navy sonar in Hawai'i may not be easily detectable (Faerber and Baird 2010). We recommend that the Navy expand its description of potential impacts to include a more thorough treatment of historical stranding information as done for the Atlantic EIS and acknowledge that species such as melon-headed whales and beaked whales have higher risks for injury and death to sonar. Potentially, a variable regarding higher risk should be incorporated into the model for calculating the take of these species.	The Navy fully acknowledged and considered all relevant and applicable research regarding strandings. The reference cited in the comment was evaluated as described in the EIS/OEIS. Regarding additional research, the Marine Mammal Stranding Report is included on the HSTTEIS.com website on the "Documents and References" page, under "HSTT Documents" and "Supporting Technical Documents." See: http://hstteis.com/DocumentsandReferences/HSTTDocuments/SupportingTechnicalDocuments.aspx

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
Hawaii DLNR-02	Page 3.4-95 of the DEIS/OEIS states, "As a result, no marine mammals addressed in this analysis are given differential treatment due to the possibility for acoustically mediated bubble growth." Regardless of the mechanism, it is clear that certain species, like the beaked and melon-headed whales, are affected by mid-frequency sonar. Bemaldo de Quiros et al. (2012b) found that deep diving marine mammals have a higher risk of decompression illness; that risk should be considered in terms of how this affects the level of take associated with sonar activities. New approaches for examining whether decompression has occurred have recently been published and should be included in established protocols for necropsy (Bernal do de Quiros et al. 2012a, 2012b).	The potential risk from sonar and other sound sources affecting the behavior of marine mammals, including the potential for acoustically mediated bubble growth, was taken into account in the Draft EIS/OEIS analysis. The discussion of this phenomenon is presented in the EIS/OEIS in Section 3.4.3.1.2.2 (Nitrogen Decompression). As noted in that section, recent modeling by Kvadsheim, Miller, et al. (2012) determined that while behavioral and physiological responses to sonar have the potential to result in bubble formation, the actually observed behavioral responses of cetaceans to sonar did not imply any significantly increased risk of over what may otherwise occur normally in individual marine mammals. The reports cited in the comment (Bernal de Quiros et al. 2012a, 2012b) were reviewed, but do not add any substantive new information to the analysis of proposed actions covered in this EIS/OEIS.
Hawaii DLNR-03	Although not described in detail, five stranding events identified as including U.S. Navy exercises as a contributing cause are listed on page 3.4-113. This and other stranding events illustrate the need for mitigation plans for live and dead strandings. Although we are aware that the Navy has participated in carcass removal and necropsy in past strandings in Hawai'i, we encourage the Navy to develop a more formal mitigation plan as part of the DEIS/OEIS. We understand that a regional stranding implementation plan is being developed collaboratively between the Navy and NOAA. We encourage the Navy (and NOAA) to seek input from the State (and territories) and to incorporate cultural considerations into protocols. This does not require the Navy to take formal responsibility for causing any marine mammal stranding, but it would make the Navy a formal partner in the activities necessary to deal with stranded animals. This should include monetary support for removal of animals and appropriate necropsy and sampling.	Although the comment is correct in that the EIS discusses five stranding events, including this discussion is for comprehensiveness and not meant to infer that Navy was a contributing cause to each of those strandings. Regarding the second part of the statement, in 2009, the Navy and NMFS developed stranding protocols and plans for each range complex that provide guidelines for response to strandings during Navy major training exercises (MTEs). Additionally, the Navy and NMFS signed a National MOU (PR-055) for stranding investigations that establishes a framework consistent with federal fiscal law requirements whereby the Navy may assist NMFS with response to and investigation of Uncommon Stranding Events (USEs) during MTEs. One component of the MOU is the regional stranding implementation plans (RSIAP) for Hawaii and Southern California that you reference. The RSIAPs delineate what the Navy and NMFS can contribute in regards to services in response to a marine mammal stranding during an MTE. The RSIAP does not have provisions for directing NOAA's handling of the stranding (including cultural practices), guiding the necropsy, nor specify direct Navy financial participation. Instead it provides guidance on things such as access to Navy installations for necropsies, availability of specialized equipment and other logistic considerations to assist stranding investigations.
Hawaii DLNR-04	Because the Navy's model of biologically significant population consequences of Navy activities included abundance estimates, the Navy DEIS/OEIS analyzed what are now considered separate populations of marine mammals associated with individual Hawaiian Islands regions. This is biologically inappropriate and does not account for the	The analysis of impacts to marine mammals in the Hawaiian Islands uses the best available science and was undertaken with National Marine Fisheries Service (NMFS) in a role as a cooperating agency for the EIS/OEIS. This included review and comment by NMFS staff

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	lack of dispersal among island regions. Because populations of many odontocete species are scientifically documented to be local and island-associated, an analysis of impact by population is necessary to assess affects to these populations. If this assessment cannot be performed now because of the need to use abundance estimates in the model, we suggest the following. These local populations are separate should be acknowledged and described, with a full literature review, in the DEIS/OEIS. The letter of authorization and DEIS/OEIS should also include language that reflects a commitment to do new calculations as abundance estimates become available. With the new Guidelines for Marine Mammal Stock Assessments being finalized and the new research that is becoming available, there should be new abundance estimate determinations for many of these stocks before the next reauthorization.	marine biologists in their role as the federal regulator for the Marine Mammal Protection Act (MMPA). Full and complete information was provided in the EIS/OEIS (see Section 3.4, Marine Mammals) with regard to the present knowledge regarding stocks ("populations") of marine mammals. This includes coordination with NMFS scientists on the latest emergent data presented in the draft Pacific Stock Assessment Report for 2012 which had yet to be finalized (as of Nov 2012). NMFS will determine the appropriate Terms and Conditions for the MMPA Letter of Authorization and the Navy will continue to coordinate with them in their regulatory role.
Hawaii DLNR-05	The Department supports the continued implementation of Marine Species Awareness Training and the use of lookouts. We suggest that mitigation measures should also include passive acoustic monitoring to help detect cryptic and long-diving marine mammals. The DEIS/OEIS mentions that marine mammals are sometimes detected this way, but does not include passive acoustic detection in protocols for mitigation, with the exception of increased vigilance by lookouts. Passive acoustic detection and localization of marine mammals has progressed significantly in the last few years. The Journal of the Acoustical Society of America will be publishing a special issue on methods for marine mammal passive acoustics later this year. We encourage the Navy to continue to get the latest information to inform mitigation that includes passive acoustic monitoring and detection.	The Navy is using both passive acoustic monitoring and visual detection when feasible, and will continue to use the latest information in developing mitigation measures. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), there are limitations to the effectiveness of passive acoustic monitoring. Passive systems are capable only of detecting vocalizing marine mammals within the frequency bands monitored by Navy personnel. Passive acoustic detections would not provide range or bearing to detected animals, and therefore cannot provide locations of these animals.
Hawaii DLNR-06	The Navy's main mitigation measures include visual detection within a radius of the activity and cessation of the activity until the marine mammal has not been seen for 30 minutes. This may not cover the beaked whales and sperm whales well, as these species can be submerged for more than an hour at a time. We suggest movement to a new area or at least an hour without seeing these species before restarting activities. We also encourage as much wait time as possible for cryptic species that are difficult to see, such as pygmy and dwarf sperm whales.	Dive behavior varies amongst species. As described in the Dive Distribution and Group Size Parameters for Marine Species Occurring in Navy Training and Testing Areas in the North Atlantic and North Pacific Oceans technical report, a 30 minute waiting period accounts for the dive capabilities typical of most species. Post-sighting activity recommencement wait periods longer than 30 minutes would be impracticable to implement and would decrease realism of activities. For activities involving platforms restricted by fuel or other constraints (e.g., helicopters), the wait times have been adjusted based on operational need and practicability of implementation. A discussion of the effectiveness of each wait time is provided in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) for each activity. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		are present, there are always more than the “one or two personnel” described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy’s reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. Lastly, species-specific identification of marine mammals is not a Lookout requirement; therefore, a single activity-specific waiting time is needed for all species.
Hawaii DLNR-07	The Navy acknowledges on page 3.4-92 that long-beaked dolphins have been directly killed by Navy activity in an incident involving explosives. This illustrates the importance of the use of mitigation zones. Some odontocetes are more cryptic and surface less often than long-beaked dolphins. As such, we recommend that the Navy not reduce any of the mitigation zones used in the previous EIS/OEIS. Smaller mitigation zones, as proposed in the DEIS/OEIS, will only increase risk to marine mammals. Even if animals are not at risk for direct injury by the sound, it is clear that behavioral responses of marine mammals can be contributing factors to injury and death, suggesting that mitigation zones should be conservatively large to account for behavior-induced injury.	The Navy revised its mitigation measures following the incident described in the comment. The mitigation measures for explosives training using both positive control firing devices and time-delay firing devices are described in the Final EIS/OEIS in Sections 5.3.2.1.2.4 and 5.3.2.1.2.5 respectively. The decrease in mitigation zone size will allow for a more focused survey effort over a smaller area, and will consequently increase the likelihood of avoidance of injury and larger threshold shifts that would result in recovery (i.e., TTS) to marine mammals.
Hawaii DLNR-08	The Department is aware that the Navy has considered and discarded a list of mitigation measures described on pages 5-52 and 5-53. The Department encourages the Navy to reconsider some of these measures. These include sharing marine mammal sighting data to augment scientific information, minimizing testing and training activity that takes place during sea states or light levels at which marine mammals are unlikely to be seen by, and avoiding "hot spots" of marine mammal activity, particularly for those animals that are listed or candidate species under the Endangered Species Act. The Navy should identify known "hot spots" for species and preferentially avoid hot spots for Endangered, Threatened, and Candidate marine mammals unless deemed necessary. There is already some mitigation of that nature in place for humpback whales. There is research on monk seal and false killer whale movements (e.g. Baird et al. 2012) that should be considered in the DEIS/OEIS as areas to avoid Navy activity if possible. The Department recognizes that the Navy must have the flexibility to train and test under a variety of circumstances, but we encourage the Navy to avoid training and testing in and near any state marine protected areas as much as is possible.	The Navy’s overall approach to assessing potential mitigation measures was based on two principles: (1) mitigations will be effective at reducing potential impacts on the resource; and (2) from an operational perspective, the mitigations are practicable and executable while not compromising safety and readiness. Through extensive discussion, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective. For example, the safety zones proposed will reduce the likelihood of physiological harm, the number of marine mammals exposed, and the intensity of those exposures. With regard to sharing marine mammal sighting data, the Navy has adopted an integrated comprehensive monitoring program (see Final EIS/OEIS Section 5.5, Monitoring and Reporting) that does provide information that is available and useful to the scientific community in annual monitoring reports. The Navy has proposed several Mitigation Areas (such as the Humpback Whale Cautionary Area), and the mitigation measures identified throughout Chapter 5 will apply to all marine mammals year round, and will be applied regardless of the location of the activity. However, any future

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
		determination of "hot spots" or biologically important areas will require an intense effort in gathering expert opinion. In that regard, Navy has, and will continue to support the Cetacean and Sound Mapping (CetMap) project, including representation on the CetMap Density and Distribution Mapping Working Group. Navy is an active sponsor and participant in CetMap, and the CetMap process is based on the same process Navy used to estimate population density in the HSTT EIS/OEIS and LOA Application. In 2012, the CetMap panel of experts determined that no biologically important areas (the panel determined that "hot spots" is not an appropriate term) could be identified based on data availability and information at hand. Furthermore, no follow-on products have identified areas of recommended avoidance. It is important to note that the areas appearing on the CetMap website are a preliminary draft that needs considerable additional input from the larger biological community before being used to identify biologically important areas in the ocean.
Hawaii DLNR-09	The DEIS/OEIS states that no consultation is needed with the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) and for the new letter of authorization. As the co-manager of the HIHWNMS, the State of Hawai'i disagrees with this point. We request that the Navy engage in a formal consultation with the HIHWNMS, as the preferred alternative (2), does include changes to activities and level of activities that could affect humpback whales. The DEIS/OEIS also includes information to support the LOA request to increase in the number of vessel strikes to large whales. We are supportive of the mitigation already in place for protecting whales in sanctuary waters, but we believe a new consultation is needed with the new proposed activity in alternative 2. The National Marine Sanctuaries Act and the implementing act of the HIHWNMS allow management of activities outside sanctuary waters if those activities affect sanctuary resources, so even if new activities will not take place within the boundaries of the sanctuary, the sanctuary should be consulted for any new activities that could impact humpback whales.	For the HSTT EIS activities, the Navy will continue to conduct anti-submarine warfare training and testing, consisting of mid- and high-frequency active sonar use. This type of activity occurs throughout the range complex, and overlaps with the boundaries of the sanctuary primarily around the islands of Maui, Lanai, and Molokai. Navy activities within the HIHWNMS are specifically identified in Appendix F of the Final Management Plan/Final EIS Volume II (National Oceanic and Atmospheric Administration 1997). These Navy activities are exempt from the prohibitions in the Sanctuary. The Navy does not propose new or modified activities in the HIHWNMS, or activities that are different from those currently conducted in this area. Therefore, proposed activities are consistent with those activities currently conducted in this area, and those described in the sanctuary's Final Management Plan/Final EIS. These HSTT activities would continue to be exempt from the prohibitions identified in the Sanctuary's regulations. HSTT activities within the HIHWNMS would be conducted with an extensive set of mitigations measures (see Chapter 5) and will avoid to the maximum extent practicable any adverse impacts on the Sanctuary resources and qualities.
Hawaii DLNR-10	For other non-marine mammal issues, underwater explosions on the seafloor within the Hawaii Range Complex are proposed for depths between 6' to 100' (pg 3.3-14) on soft-bottom habitats to reduce impacts. Charges should also be set not only in soft-bottom	The Navy conducts explosive training in locations used consistently for these activities for decades. These locations are sufficiently distant from live corals. Large explosive charges occur farther from shore,

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
	habitats but sufficiently away from live corals to minimize live coral trauma. Large explosive charges should be used outside of State marine waters.	outside of State marine waters.
Hawaii DLNR-11	The Navy should conduct studies on the effects of explosives on marine fishes within the Range Complex (chapter 3.9.3.1) to document the extent of kills associated with various fleet training operations. The studies could estimate the total numbers and species of marine life that are known to have been killed during different types of operations. This could provide important information on which operations cause the most kills and potentially ways to mitigate such losses.	The Navy is relying on the best available research regarding explosive effects to marine fishes. The EIS/OEIS analysis of all impacts to fishes is a reflection of this research.
Hawaii DLNR-12	Unexploded munitions (chapters 3.3.3.2.5 & 3.7.3.2.2) should be carefully tracked to enable subsequent removal, especially if they fall within State marine waters or in sensitive habitat areas. Such unexploded ordnances should be removed immediately to minimize encrusting organisms from covering the ordnance, making finding and removing such ordnance more difficult with the passage of time.	All explosive ordnance such as bombs, missiles, and other projectiles are used outside Hawaii State marine waters. Any unexploded ordnance settles to the ocean bottom in very deep water, making it extremely impractical to recover. The fate of these military munitions in the marine environment is analyzed in Section 3.1.3.1.5 (Fate of Military Munitions in the Marine Environment) of the EIS/OEIS.
Hawaii DLNR-13	Chapter 3.5 Marine sea turtles appears to be missing from the documents as Vol. I ends at chapter 3.4 Marine Mammals, and Vol. 2 begins at chapter 3.6 Seabirds.	This mistake was limited to the volume uploaded to the HSTTEIS.com website and has been corrected. Thank you for bringing this to the Navy's attention.
Hawaii DLNR-14	Amphibious vessels would intentionally contact the seafloor (pg 3.3-19). To the extent practical, such landings should be limited to sand beaches or soft-bottom habitats to minimize impacts to hard bottom. The operational routes of the amphibious vessels should also be pre-determined to avoid live coral beds or hard bottom habitats. In the past, the routes used have been over hard bottoms, and groundings have caused damage to both the sea floor habitat and to the vessels. Unforeseen vessel groundings should be reported to the State immediately so that damage assessments can be conducted and corrective actions taken, as needed. The Navy should work collaboratively with the State throughout such operations to minimize damage. The State of Hawai'i appreciates the value of military readiness but also believes strongly in protection of all state marine resources and culture that make a Hawai'i unique and special place. We encourage collaboration and dialogue among our agencies and the Navy to provide the best protection to both our people and our environment.	All amphibious landings occur only on pre-determined and routinely used sites where a pre-landing analysis has confirmed the absence of corals.
State of Hawaii, Department of Land and Natural Resources,	Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments. At this time, enclosed are comments from (I) Land Division - Oahu District; (2) Land Division - Hawaii District; (3) Land Division - Maui District; (4) Engineering Division; (5)	Thank you for participating in the NEPA process.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
Land Division	Division of Boating & Ocean Recreation; and (6) Commission of Water Resource Management, on the subject matter. No other comments were received as of our suspense date.	
State of Hawaii Department of Land and Natural Resources, Land Division-Oahu District	We have no comments.	Thank you for participating in the NEPA process.
State of Hawaii Department of Land and Natural Resources, Land Division-Hawaii District	We have no objections.	Thank you for participating in the NEPA process.
State of Hawaii Department of Land and Natural Resources, Land Division-Maui District	We have no comments.	Thank you for participating in the NEPA process.
State of Hawaii Department of Land and Natural Resources, Engineering Division	We have no objections.	Thank you for participating in the NEPA process.
State of Hawaii Department of Land and Natural Resources, Division of Boating and	We have no comments.	Thank you for participating in the NEPA process.

Table E.3-1: Responses to Comments from Agencies (continued)

Commenter	Comment	Navy Response
Ocean Recreation		
Department of Emergency Management, City and County of Honolulu	The City supports the U.S. Navy's mission to maintain, train and equip combat-ready military forces capable of winning wars, deterring aggression and maintaining freedom of the seas. Furthermore, the City appreciates the U.S. Navy's open communication with the community through scheduled and announced open house public meetings (i.e. Friday, June 15, 2012, McKinley High School); representatives of OEM will participate in this open house. Upon review of the Draft EIS/OEIS we believe the U.S. Navy's standard operating procedures, mitigation measures and active monitoring will assure that operation, training and testing impacts to the people of Honolulu, its lands and waters are minimal. We believe the proposed use of active sonar and explosives in the Study Area in compliance with existing national environmental policies will have minimal impact upon public health and safety to citizens, cultural resources, general and unique Hawaiian marine life. We defer to our sister counties and the State of Hawai'i, comments in reference to portions of the HSTT activities which impact their local area.	Thank you for participating in the NEPA process.
Department of Parks and Recreation, City and County of Honolulu	Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement for the subject training and testing activities of the United States Navy. The Department of the Parks and Recreation has no comment, as the proposed activities will have no impact to any program or facility of the Department. you may remove us as a consulted party to the balance of the EIS process.	Thank you for participating in the NEPA process.

Table E.3-2 contains comments from Native American Tribes received during the public comment period and the Navy's response. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered.

Table E.3-2: Responses to Comments from Native American Tribes

Commenter	Comment	Navy Response
Pala Tribal Historic Preservation Office	We have consulted our maps and determined that the project as described is not within the boundaries of the recognized Pala Indian Reservation. The project is also beyond the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Therefore, we have no objection to the continuation of project activities as currently planned and we defer to the wishes of Tribes in closer proximity to the project area. We appreciate involvement with your initiative and look forward to working with you on future efforts.	Thank you for participating in the NEPA process.
Soboba Band of Luiseno Indians	The Soboba Band of Luisei'io Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. At this time the Soboba Band does not have any specific concerns regarding this project, but wishes to defer to the to other tribes closer to the project area. The tribe requests notification of any inadvertent discoveries that may be discovered during the course of the project.	Thank you for participating in the NEPA process.

Table E.3-3 contains comments from non-governmental organizations received during the public comment period and the Navy's response. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered.

Table E.3-3: Responses to Comments from Organizations

Commenter	Comment	Navy Response
Animal Inc. (Electronic)	I greatly urge you to protect dolphins and whales along the west coast who lately have been at risk of dying out because of dangerous toxins coming from boats, and fishing nets. Some people might be thinking the navy is responsible for this. Thank you for reading this letter, Ellie Rose Mattoon Manager of Mammal department Animal INC.	Thank you for participating in the NEPA process.
Aquarium Maintenance-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 of the Draft EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities. The increase in harassment levels is due to several contributing factors that make it inappropriate to compare takes from previous studies: • An increase in training and testing activities and the inclusion of more activities and sources, such as pierside sonar testing, to meet emerging requirements • This EIS/OEIS now covers most testing, which was previously covered under other environmental analyses. • This EIS/OEIS now includes a number of previously unanalyzed sound sources • Combined geographical areas (inclusion of both SOCAL and Silver Strand Training Complexes, and areas not previously analyzed such as San Diego Bay) • Included activities conducted along a transit corridor between SOCAL and Hawaii that account for additional potential harassments • Updated marine mammal density information that reflects current species abundance • New acoustic effects model that provides a more accurate prediction of animal movement and therefore, potential exposures

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		• New acoustic threshold criteria based on the best available science that is more protective of marine mammals, extends the ranges to effects of sound sources, and results in higher numbers of predicted level A takes. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
Aquarium Maintenance-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life. These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
Audubon Society, San Diego -01 (Electronic)	The San Diego Audubon Society has attended outreach sessions and reviewed the Subject EIS. We urge that the Navy seriously consider the following comments and upgrade the Final EIS to incorporate them to actually minimize the environmental impacts of this Training and Testing project. If these issues are not addressed, the EIS will clearly fail to satisfy the intent and the letter of NEPA. PROTECTION OF SEABIRDS Section 3.6.3, Environmental Consequences states: "Certain activities take place in specific locations or depth zones within the Study Area outside of the range or foraging abilities of seabirds. Therefore, seafloor device strike, cable and wire entanglement, parachute entanglement, and ingestion of munitions were not carried forward in this analysis for seabirds." However other activities, such as those near San Diego, the Channel Islands, Coronado Island, the Hawaiian Islands, etc. will take place well within range and foraging range of seabirds including those listed as threatened and endangered. So, an analysis of the impacts of those activities must be included in the EIS for those areas. It is especially difficult to accept the cavalier dismissal of those impacts for the endangered California Least Terns. Their foraging range is only known for breeding adults and fledglings during nesting season. Their foraging area for the rest of the year is assumed to be at sea somewhere, but the distribution is not known. If the Navy is basing its assumption on information on the distribution of Least Terns that is not available to the regulatory and ornithological community, the EIS must provide that information for their assessment. Failing that, the EIS must address these potential impacts. The document identifies several species of seabirds that warrant protection under the Endangered Species Act and the International Migratory Species Act. Some of these species dive many feet underwater to find and catch fish. The EIS includes an acoustical/physiological analysis addressing a range of impacts on marine mammals, from temporary hearing loss to mortality, as a function of the distance between the mammal and the transmitting sonar platform. But, the EIS asserts that no damage will be done to diving seabirds by high power sonar transmissions. We did not find any analysis to support that very unlikely conclusion. We urge that the likely impacts to seabirds be quantified and presented in the EIS. The EIS states "… military readiness activities are exempt from the take prohibitions of the Migratory Bird Treaty Act provided they do not result in a significant adverse effect on a population of a migratory seabird species." But, to satisfy NEPA, the EIS needs to assess, quantify, and present the likely impacts to these species, even if no mitigation will be required under the Migratory Bird Treaty Act. Otherwise reviewers will not be able to assess whether the project is likely to or not likely to result in a significant adverse effect on a population of a migratory seabird species or specific population of that species. The EIS mentions that marine mammals are detected by trained observers with	A thorough analysis of acoustic impacts to seabirds appears in Section 3.6.3.1 (Acoustic Stressors) which was based on the best available science. This section addressed deep diving birds. The EIS/OEIS concluded there would be no long-term impacts from sonar to Marine Habitats (3.3) or Fish (3.9), and no indirect impacts are expected for seabirds. Because the Navy's proposed activities are not likely to result in impacts to birds, identification of birds by Navy Lookouts would provide no discernable benefit. In conjunction with the NEPA process, the Navy has completed consultations with USFWS and NMFS under the ESA and MSFCMA, and required coordination under all other applicable laws.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	binoculars. We urge that those observers also be trained to detect the listed threatened or endangered seabirds that are known to frequent the training and testing areas and that high power sonar transmissions be delayed while the threatened and endangered species are foraging within a range that could cause damage to the seabirds.	
Audubon, SD-02	ALTERNATIVES The document states that having trained lookouts with binoculars on transmitting ships will adequately reduce the impacts of high power sonar transmissions on marine mammals This is a very crude approach considering the technology available to the Navy. Lookouts may be effective in some ideal situations, but the Navy should address alternatives that might be more effective to significantly reduce impacts on marine mammals. The Navy has a large scientific staff that is uniquely appropriate for addressing technical solutions to undersea problems such as the detection and tracking of marine mammals. We will list a few alternatives in the following paragraphs, but the Navy should have addressed all of these and more in the preparation of this EIS. Marine mammals are typically more visible from the air than from the bridge of a ship. Helicopters or drones could be used to detect and track whales at longer ranges than observers on the bridge. Doing so would give the Navy the flexibility to have the ship change course and or speed to avoid proximity instead of only having the option to terminate transmissions when a marine mammal is nearby – the only option available if on-board lookouts are the only sensor system being used. Much of the activity under this project will be located in training and testing ranges that have a variety of sensors and analysis equipment that evaluate the performance of the systems being tested. Can these instruments be used to determine the relative locations of ships and marine mammals? If not, can they be modified to do so? These test ranges have range support vessels that are, or can be, equipped with low power, medium resolution sonar systems and additional locations for lookouts that can be used to detect and keep track of marine mammals in the test ranges. Using such vessels to track whales in the vicinity of a transmitting ship could substantially reduce the likelihood of inadvertently damaging a marine mammal. The blow of a large marine mammal has a large heat signature. The EIS should investigate using heat detection systems on the transmitting ship and/or on support craft to increase the likelihood of detecting a marine mammal before it gets close enough to be damaged by a high power active sonar transmission. Woods Hole Oceanographic Institute has developed sonar buoys to provide information for the protection of Right Whales from shipping on the East Coast. The use of the WHOI-type buoys or conventional sonobuoys or other remote acoustic sensors should have been addressed and analyzed in the EIS. The Navy's existing undersea surveillance system might be useful to detect and localize vocalizations of larger marine mammals in a large portion of the operating and transit area of this project to avoid	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas. The Navy uses airborne search assets when available, and the use of acoustic monitoring is not always warranted, nor practicable from an operational standpoint. Some events do use passive acoustic monitoring as part of the mitigation when practicable, including Improved Extended Echo Ranging Sonobuoys, Explosive Sonobuoys using 0.6-2.5 Pound Net Explosive Weight, Explosive Torpedo Testing, and Sinking Exercises. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	impacts in real time. But, it was not addressed in the EIS. CONCLUSIONS The populations of many threatened, endangered, and other species are declining due to declining fisheries, declining nesting opportunities, increasing predation, climate change, ocean litter, etc. We urge that this EIS be reissued and modified to seriously analyze and quantify the project's impacts to seabirds and identify means to reduce those impacts. The populations of many species of marine mammals are also declining because of collisions with ships, noise pollution, declining fisheries, climate change, etc. This project needs to seriously minimize its contribution to the decline of these species. Its reliance on lookouts with binoculars instead of also addressing a range of other promising alternatives does not fulfill the letter or the intent of NEPA. We urge that the Navy reissue this EIS with a serious and positive review of alternatives that will significantly reduce the project's impacts on marine mammals. This EIS is obviously very costly due to its size. The environment, the Navy, and taxpayers would have benefited if the emphasis had been on quality and rigor instead of volume. We urge that it be rewritten and reissued with that emphasis. In case of questions or follow-up, I can be reached at 619-224-4591 or peugh@sandiegoaudubon.org	
Center for Biological Diversity (Oral-Oahu)	I'm Miyoko Sakashita, Center for Biological Diversity, and we also will be submitting some written comments. And I think that the main thing I want to do is express concern about the sheer number of takes that are associated with the DEIS. It looks like it's about 14 million, and that it -- in Hawaii alone it's about a 400 percent increase from the prior activities. And while I think it's good that the modeling has become better and is probably a more accurate assessment of impact on marine mammals and other species, but this is a very large number and a primary concern. Those concerns for us, you know, first of all, are sonar impact on marine mammals, the ability to cause hearing loss, and even in 2004 was supposedly to be associated with about 200 whales stranding in Hanalei Bay, as well as other impacts, especially on fish, that really need to be taken into account. There are reports of other known acoustic disturbances that have caused problems with fish with hearing loss with reproductive issues and developmental issues, and in areas where there have acoustic activities, there's been noticed catch decreases for fishermen on the order of about 40 to 80 percent, so we think that should be looked at. Other concerns in addition to the sonar impacts are things like the toxins that will be released from ordnances, ammunitions, sinking ships that can potentially get into the food chain and affect marine life and get in the fish and affect people. I guess underwater explosions and their direct impact on killing species and disturbing habitat is another concern. And then we -- I know -- I think that the primary reason that I raise these	The increase in harassment levels is due to several contributing factors that make it inappropriate to compare takes from previous studies: • An increase in training and testing activities and the inclusion of more activities and sources, such as pierside sonar testing, to meet emerging requirements • This EIS/OEIS now covers most testing, which was previously covered under other environmental analyses. • This EIS/OEIS now includes a number of previously unanalyzed sound sources • Combined geographical areas (inclusion of both SOCAL and Silver Strand Training Complexes, and areas not previously analyzed such as San Diego Bay) • Included activities conducted along a transit corridor between SOCAL and Hawaii that account for additional potential harassments • Updated marine mammal density information that reflects current species abundance • New acoustic effects model that provides a more accurate prediction of animal movement and therefore, potential exposures

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	concerns is the real need to look at a very significant alternative that protects the most biologically sensitive areas, and things like that would be potentially coastal areas, proposed monk seal habitat, and other areas that are marine managed areas that should be considered in the alternative. Well, thank you for your time, and we of course would like to see full compliance with the Endangered Species Act, Environmental Protection Act, Migratory Bird Treaty Act, and all that other slew of environmental laws out there to protect the animals.	• New acoustic threshold criteria based on the best available science that is more protective of marine mammals, extends the ranges to effects of sound sources, and results in higher numbers of predicted level A takes. Also based on response to comments, Navy has supplemented the discussion regarding hearing loss as a general topic. Please see the project web site (www.HSTTEIS.com) for the Marine Mammal Stranding Report which has a full review of the scientific record concerning marine mammal strandings and sonar use, including the Hanalei Bay event, and sonar use. Regarding impacts to fish, a thorough analysis of acoustic impacts to fish appears in Section 3.9 (Fish) of the Draft EIS/OEIS. The EIS/OEIS concluded there would be no long-term impacts from sonar to fish, and there is no evidence or research indicating decreased fish catch resulting from Navy activities. Regarding toxins entering the food chain, the EIS/OEIS includes analysis of this issue in two sections; Section 3.1 (Sediments and Water Quality) and Section 3.9 (Fish). In both sections, the conclusions indicate that all levels of metals, chemicals, and other byproducts would be either below detectable levels or at levels below existing standards, regulations, and guidelines. In conjunction with the NEPA process, the Navy has completed consultations under the ESA and MSFCMA, and required coordination under all other applicable laws.
Cetacean Commonwealth (Electronic)	As to our comments on this Draft EIS, we respectfully request that in whatever ways you can express our concerns for the wellbeing of our People of the Sea, you offer them on our behalf. As the articles in the Hawaii Tribune-Herald June 6 & 7th point out there are many more deaths through fishing nets and lines, pollution, toxins, dead zones, off shore seismic testing and so on. We know this, of course. We have learned first- hand of your efforts in extra mitigation and being super mindful through our visits to PMRF and appreciate the work done. Shifting the dates of these exercises to times and locations when the waters are largely empty of Cetacea in numbers would be a Miracle, leaving them to breed and calve in relative security. Surely with all the sophisticated technology at the Navy's finger tips a way can be found to keep the ships and their trainings with live fire and sonar well away from these makamae (precious) Global Treasures, each and every one of them. On Behalf of the Cetacean Commonwealth, Star Newland Domestic Harmony Awareness*Action Initiative www.planetpuna.com	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
The Chamber of Commerce of Hawaii (Written)	The Chamber of Commerce of Hawaii and its Military Affairs Council are in full support of the recommendation to adopt Alternative 2 (preferred alternative) as outlined in the Hawaii-Southern California Training and Testing Activities, Draft Environmental Impact Statement/Overseas Environmental Impact Statement, dated 12 May 2012. The rising security concerns in the Asia Pacific region have required the US to step up its security and foreign policy strategies to deter and contain military aggression. Moreover, more than 50% of the world's commerce and trade flows through the region and any breakdown in security would serve to seriously threaten the economies of the US and our Asia Pacific partners. Based on our review of the EIS/OEIS, it is our understanding that Alternative 2 provides for consolidating three previously approved environmental documents into one planning document. This reassessment would provide for reauthorizing previous approvals granted under the Marine Mammal Act (MMA) and the Endangered Species Act (ESA). Alternative 2 further provides for the expansion of Study Area boundaries and specifies adjustments in the location, types, and tempo of training and testing activities. We believe that the actions proposed in the EIS/OEIS satisfy the requirements outlined in the NEPA, MMPA, and ESA, and would enable the US Navy to satisfactorily meet the requirements placed on the 21" century naval force. We are not clear on NEPA procedures, but The Chamber suggests that the Navy seek written concurrences of federal agencies that are responsible for monitoring compliance with the NEPA, MMA, ESA, and other governing regulations. We believe that this validation is essential to demonstrating to the public that the governing agencies agree that the US Navy has satisfactorily met the requirements established in federal laws prior to the rendering of a Record of Decision.	Thank you for participating in the NEPA process.
Earthjustice-01 (Electronic)	Earthjustice submits these comments on behalf of the Center for Biological Diversity in response to the U.S. Navy's request for public input on the draft environmental impact statement/overseas environmental impact statement ("DEIS") for Hawaii-Southern California Training and Testing Activities, 77 Fed. Reg. 27,743 (May 11, 2012). These comments necessarily will be brief because, frankly, the Navy has failed to provide the public with adequate time to wade through the over 1600 pages of the DEIS's two volumes. Allowing a mere fifteen days beyond the 45-day bare minimum the National Environmental Policy Act ("NEPA") requires for public review of even abbreviated draft EIS's is far short of what is required to give the public a meaningful opportunity for input. See 40 C.F.R. § 1506.10(c); California v. Block, 690 F.2d 753, 770 (9th Cir. 1982) ("NEPA's public comment procedures are at the heart of the NEPA review process"). If the Navy truly wished to hear from the people of Hawai'i regarding their concerns about the potential environmental impacts associated with this project, it would have given them more time. We are aware that other parties are submitting comments on the deficiencies of the Navy's analysis of proposed training activity impacts and proposed	The Navy has complied with all NEPA notification requirements under 40 C.F.R. Part 1506. NEPA regulations require that agencies not allow less than 45 days for comments on a Draft EIS. Please note that public comments are very important to the NEPA process. The Navy included an extra 15 days for review of this document for an extended comment period of 60 days total. The Navy also offered various opportunities for the public to learn about and comment on this proposal, including a project website that allowed viewing, downloading and commenting on the EIS/OEIS, and six public meetings across Southern California and Hawaii.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	mitigations, and we share their concerns.	
Earthjustice-02	Given the limited time to review the DEIS, we will focus our comments on highlighting a fatal flaw that can only be cured by issuance of a revised DEIS (with, hopefully, improved analysis): the Navy's total failure to evaluate a true "no action" alternative. NEPA commands all federal agencies, including the Navy, to prepare an environmental impact statement ("EIS") for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). "The primary purpose of an [EIS] is to serve as an action-forcing device to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government." 40 C.F.R. § 1502.1. An EIS must "provide full and fair discussion of significant environmental impacts and [must] inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." Id. An EIS must discuss, among other things: the environmental impact of the proposed federal action, any adverse and unavoidable environmental effects, any alternatives to the proposed action, and any irreversible and irretrievable commitment of resources involved in the proposed action. 42 U.S.C. § 4332(2)(C); see also id. § 4332(2)(E). The alternatives section "is the heart of the environmental impact statement." 40 C.F.R. § 1502.14. In this section, the Navy must "[r]igorously explore and objectively evaluate all reasonable alternatives," devoting "substantial treatment to each alternative considered in detail ... so that reviewers may evaluate their comparative merits." Id. § 1502.14(a), (b). NEPA specifically mandates that every EIS "[i]nclude the alternative of no action." Id. § 1502.14(d). The core purpose of the alternatives analysis is to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." Id. § 1502.14. NEPA's goal is to ensure "that federal agencies infuse in project planning a thorough consideration of environmental values." Conner v. Burford, 836 F.2d 1521, 1532 (9th Cir. 1988). "The consideration of alternatives requirement furthers that goal by guaranteeing that agency decisionmakers '[have] before [them] and take [ ] into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact and the cost-benefit balance.'" Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228 (9th Cir. 1988) (citation omitted). The Ninth Circuit has emphasized that "[i]nformed and meaningful consideration of alternatives-including the no action alternative-is … an integral part of the statutory scheme." Id. (emphasis added). In the DEIS, the Navy purports to consider a "no action" alternative, but fails to do so. The DEIS asserts that the "no action" alternative may be "thought of in terms of continuing with the present course of action until that action is changed." DEIS at 2-63. Accordingly, rather than analyze a "no action" alternative that involves ceasing training and testing activities, the DEIS evaluates only the continuation of "currently conducted training and testing activities (baseline activities) and force structure (personnel, weapons and assets) requirements as defined by existing Navy	The Navy's selection and analysis of alternatives in the EIS/OEIS meets all NEPA requirements. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. As stated in Section 2.6 (No Action Alternative), the Council on Environmental Quality "allows the No Action Alternative to be thought of in terms of continuing with the present course of action until that action is changed. The No Action Alternative for this EIS/OEIS would continue currently conducted training and testing activities (baseline activities) and force structure (personnel, weapons and assets) requirements as defined by existing Navy environmental planning documents." It is erroneous to assume the Navy's training and testing is conducted pursuant to MMPA incidental take authorizations. The training and testing activities are continuing pursuant to the Navy's Title 10 responsibilities and the Fleet Readiness Training Plan that implements those requirements.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	environmental planning documents." Id. The flaw in the Navy's logic is that current training and testing activities occur pursuant to Marine Mammal Protection Act ("MMPA") incidental take authorizations, issued by the National Marine Fisheries Service ("NMFS"), and those authorizations will expire in early 2014. Id. at 1-3. Thus, to conduct training and testing beyond early 2014, the Navy needs new authorizations from NMFS. The Navy knows this; the DEIS expressly states that it is "needed to support the Navy's request to obtain an incidental take authorization from NMFS" for the next phase of operations and that "[t]he Navy will use this new analysis to support incidental take authorizations under the MMPA." Id.; see also id. at 1-12 ("this document will serve as NMFS's NEPA documentation for the rule-making process under the MMPA"). Presumably, NMFS also intends to rely on this round of NEPA analysis to support any incidental take statements issued pursuant to the Endangered Species Act. In situations involving "federal decisions on proposals for projects," such as whether to issue a new incidental take authorization for proposed Navy training and testing, the Council on Environmental Quality has stated that "no action" means "the proposed activity would not take place." 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981). Thus, to support NMFS's permitting decision, the Navy was obliged, but failed, to evaluate a true "no action" alternative involving denial of the request for incidental take authorization. See, e.g., Western Watersheds Project v. Rosenkrance, 2011 WL 39651, at *10 (D. Idaho Jan. 5, 2011) ("Most troubling is that BLM did not consider a real no action alternative. … If BLM truly did take no action, then the old grazing permits would expire, no new permits would issue, and no range improvements would occur. No action would be no action. This is a reasonable, and obvious, alternative to issuing new grazing permits."); Ocean Mammal Institute v. Gates, 546 F. Supp. 2d 960, 977 (D. Haw. 2008) ("The Court … fails to see how a 'no action' alternative that involves the continuation of individual training exercises using MFA sonar subject to the Navy's discretionary environmental review falls within NEPA's explicit alternatives analysis requirement"). Having failed to evaluate the required "no action" alternative, the Navy may not proceed with finalizing the DEIS. See ʻĪlioʻulaokalani Coalition v. Rumsfeld, 464 F.3d 1083, 1101 (9th Cir. 2006) (failure to consider reasonable alternative "renders the Army's EISs inadequate"). Rather, the Navy must issue a revised DEIS that analyzes a true "no action" alternative (i.e., no incidental take authorizations), providing the requisite "benchmark" to permit the public and Navy "decisionmakers to compare the magnitude of environmental effects of the action alternatives." 46 Fed. Reg. at 18,027. The Navy then must circulate the revised DEIS for another round of public review and comment. See 40 C.F.R. § 1502.9. Thank you for your consideration of these comments. Please feel free to contact me via email (dhenkin@earthjustice.org) or telephone (808-599-2436, ext. 6614) if you would like to discuss our concerns.	

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
Humane Society, Hawaii (Oral-Hilo)	I'm Inga Gibson. I'm the Hawaii State Director with the Humane Society, United States. We will be submitting formal written comments, but I wanted to make a few comments for the record, if I may. We are very concerned, obviously, with the potential impacts on marine mammals and other animals in the Pacific and Hawaii. We're especially concerned about the potential permanent and temporary hearing loss, lung injuries, gastrointestinal injuries, and death. We understand that there's no presentation or analysis of alternatives at this time that would in any way significantly reduce the unprecedented impacts and level of harm to these marine animals, many of which are protected under both the MMPA and the SMR, or in some cases are critically endangered, such as the Hawaiian monk seal. We are concerned with the Navy's mitigation scheme, centered on the ability of lookouts for whales and dolphins, and do not believe that it will result in an appreciative decrease in marine mammal take. Furthermore, we are concerned that the Navy appears to dismiss what is acknowledged to be the most effective means to reduce marine mammal take and avoiding areas associated with high marine mammal density. That, again, is what we would like to see, is an avoidance and a better scheme in avoiding altogether some of the areas where there is strong marine mammal presence. We also encourage the Navy in their continued efforts to be seen as an effective steward of the ocean environment to take steps to significantly reduce the level of harm in training and testing activities. Again, we'll be submitting formal more detailed written comments. There is also concern about the significant increase in the proposed takes under the new DEIS from the prior EIS and the numbers of animals potentially impacted. Also a concern with the verification of take, and the methods used to verify take, if that is even verified. Again, thank you for this opportunity.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. Also based on response to comments, Navy has supplemented the discussion regarding hearing loss as a general topic.
Koholā Leo-01 (Electronic)	To Whom it may concern This DEIS is fatally flawed and fails to comply with the basic requirements of NEPA. And it fails to properly analyze impacts on marine mammals. The Navy's assessment of impacts is consistently undermined by its failure to meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. The DEIS disregards a great deal of relevant information adverse to the Navy's interests,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	uses approaches and methods that would not be acceptable to the scientific community, and ignores whole categories of impacts. In short, it leaves the public with an analysis of harm—behavioral, auditory, and physiological—that is at odds with established scientific authority and practice. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA. The DEIS fails to address other impacts to marine mammals including: stress & indirect effects.	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy has used the best available science in the development of this EIS/OEIS, and is fully compliant with all applicable environmental laws, including NEPA.
Koholā Leo-02	The DEIS fails to address effects of toxic chemicals, hazardous materials and waste oil spills on cetaceans and all marine life. The Navy must adequately evaluate impacts and propose mitigation for each category of harm for all species marine life. And each individual federal activity that is to have a significant environmental impact should have its own environmental analysis. For example RIMPAC and DARPA each need their own separate EIS. To comply with NEPA, an agency must discuss measures designed to mitigate its project's impact on the environment. See 40 C.F.R. § 1502.14(f). There is a large and growing set of options for the mitigation of noise impacts to marine mammals and other marine life, some of which have been imposed by foreign navies—and by the Navy itself, in other contexts—to limit harm from high-intensity sonar exercises. Yet here the Navy does little more than set forth an abbreviated set of measures, dismissing effective measures out of hand. The Navy's reliance on visual observation as the mainstay of its mitigation plan is therefore profoundly misplaced. The Navy can, and must, do more to mitigate the harm on marine wildlife.	The reasonably foreseeable effects of chemicals and other materials were fully analyzed in the Draft EIS/OEIS in Section 3.1 (Sediments and Water Quality) for their direct effect on water quality, and in Section 3.4 (Marine Mammals), Section 3.5 (Sea Turtles), Section 3.6 (Seabirds), Section 3.7 (Marine Vegetation), Section 3.8 (Marine Invertebrates), and Section 3.9 (Fish) for their potential secondary impacts to marine life. The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 of the EIS/OEIS. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Koholā Leo-03	Given the scope of the proposed action, the deficiencies of the Navy's cumulative impacts assessment represents a critical failure of the DEIS. In relation Sonar impact on cetaceans the likely cause of mass strandings are panic, bubble formation and/or decompression sickness (based on real scientific published papers): 1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic These three points were either not included or not addressed in a scientifically relevant matter. The following five papers must be included in the EIS and the data should be researched and analyzed by NON-Navy scientists and contractors: J. R. POTTER;, 'A Possible Mechanism for Acoustic Triggering of Decompression Sickness Symptoms in Deep-Diving Marine Mammals' Paper presented at the IEEE International Symposium on Underwater Technology 2004, Taipei Taiwan, April 2004. PARSONS, E. C. M.; SARAH J. DOLMAN; ANDREW J. WRIGHT; NAOMI A. ROSE and W. C. G. BURNS. MARINE POLLUTION BULLETIN 56(7):1248-1257. 2008. Navy sonar and cetaceans: Just how much does the gun need to smoke before we act? TYACK, PETER L. JOURNAL OF MAMMALOGY 89(32):549-558. 2008. Implications for marine mammals of large-scale changes in the marine acoustic environment. WRIGHT, A. J.; N. AGUILAR SOTO; A. BALDWIN; M. BATESON; C. BEALE; C. CLARK; T. DEAK; E. EDWARDS; A. FERNANDEZ; A. GODINHO; L. HATCH; A. KAKUSCHKE; D. LUSSEAU; D. MARTINEAU; L. ROMERO; L. WEILGART; B. WINTLE; G. NOTARBARTOLO DI SCIARA and V. MARTIN. INTERNATIONAL JOURNAL OF COMPARATIVE PSYCHOLOGY 20(2-3):274- 316. 2007. Do marine mammals experience stress related to anthropogenic noise? FAERBER, M .M., R. W. BAIRD. 2010.	Discussion of the general topics ("panic, bubble formation and/or decompression sickness") noted in the comment were thoroughly discussed in the Draft EIS/OEIS. In particular see Section 3.0.5.7.1.3 (Physiological Responses) for the presentation of the conceptual framework for analysis and Section 3.4.3.1.2.1 (Direct Injury). For a specific discussion of strandings, see Section 3.4.3.1.2.7 (Stranding) and note that a more detailed presentation was offered in a companion Cetacean Stranding Technical Report ("Marine Mammal Strandings Associated with U.S. Navy Sonar Activities") that is referenced in the DEIS/OEIS and available on the HSTT EIS/OEIS website (HSTTEIS.com). The three points raised ["1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic"], are covered within the material as described above. With regard to the references noted, while these particular five references were not cited, all were reviewed during preparation of the Draft EIS/OEIS except Potter (2004), which discusses a hypothesis covered in the Draft EIS/OEIS using the following more recent science and data from seven references: Dennison et al. (2011); Fahlman et al. (2006); Hooker et al. (2009); Moore et al. (2009); Southall et al (2007); Tyack et al. (2006); Zimmer and Tyack (2007). Finally, the EIS/OEIS has been created with National Marine Fisheries Service acting as a cooperating agency with input to both the Draft and Final versions. The team also includes a number of non-governmental scientists and subject matter experts.
Koholā Leo-04	Does a lack of observed beaked whale strandings in military exercise areas mean no impacts have occurred? A comparison of stranding and detection probabilities in the Canary and main Hawaiian Islands. Marine Mammal Science DOI: 10.1111/j.1748-	Please see the project web site (www.HSTTEIS.com) for the Marine Mammal Stranding Report which has a full review of the scientific record concerning marine mammal strandings, including the Hanalei

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	7692.2010.00370.x In the DIES the Navy also fails to include data from the July 2004 Hanalei Bay event, in which 150-200 melon-headed whales were embayed for more than 24 hours during the Navy's Rim of the Pacific exercise. According to the Navy's analysis, predicted mean received levels (from mid-frequency sonar) inside and at the mouth of Hanalei Bay ranged from 137.9 dB to 149.2 dB. The Navy has from the beginning denied any connection between its major international exercise and the mass stranding. However, the Navy's specious reasoning is at odds with the stranding behavior observed during the event and with NMFS' report on the matter, which ruled out every other known potential factor and concluded that sonar was the "plausible if not likely" cause. The Navy's failure to incorporate these numbers into its methodology as another data set is unjustifiable. Hawaii is very different from other areas. The EIS needs to identify areas where the species are for each island. On October 28, 2004 the European Parliament passed a resolution that is probably one of the strongest statements by an international body yet on the issue of military sonar and its impact on cetaceans. This resolution called on the European Commission and the Member States to: ''adopt a moratorium on the deployment of high-intensity active naval sonars until a global assessment of their cumulative environmental impact on marine mammals, fish and other marine life has been completed"; and ''immediately restrict the use of high-intensity active naval sonars in waters falling under their jurisdiction"; as well as to ''set up a Multinational Task Force to develop international agreements regulating noise levels in the world's oceans, with a view to regulating and limiting the adverse impact of anthropogenic sonars on marine mammals and fish." (European Commission, 2004) Indeed, the greatest user of military sonars in the world, the US Navy, appears to be in denial about the situation and dismissive of the concerns of the majority of the population and other nations. And the most shocking part of the document is the "justification" for the NOAA Marine Fisheries "take" permit to harm and kill endangered marine mammals more than 33 million times during five years of testing and training with sonar and explosives. Including more than five million instances of temporary hearing loss, 16,000 instances of permanent hearing loss (since no one involved in this DEIS seems to understand science, here is an important fact: a deaf cetacean is a dead cetacean), almost 9,000 lung injuries, and more than 1,800 deaths. These numbers are unconscionable and unacceptable! So, again we state your "science" in the DEIS is severely flawed and inadequate! We request this DEIS be re-done by non-Navy professionals. For the whales and healthy oceans, Sincerely, Koholā Leo (Whale Voice) http://www.koholaleo.com/	Bay event, and sonar use. Information regarding distribution of marine mammals around the Hawaiian Islands is provided in the Draft EIS/OEIS based on the best available information. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Na Kupuna Moku O Keawe	Please excuse me. I am grossly unprepared for this. I did not even know of this meeting or that the process had gone this far until yesterday afternoon. One of my major concerns is, is that I've been involved with the military buildup here in the islands. Aloha. My name is Hanalei Fergerstrom. I am a spokesman for Na Kupuna Moku O Keawe,	The Navy shares your desire to preserve marine life. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	which encompasses all six major districts of the island of Hawaii. So for those of you who do not know, this is the council of the elders. I'm also a haumana of the Heiau O Lono. This is a religious organization (inaudible). Anyway, I have been involved with the military buildup here for over 12 years. I was involved with the low sonar frequency testing that was done here, I believe, about 12 years ago. I actually filed suit against the Navy. During that time, my suit was denied because it was basically moot. You were just pulling out of Hawaii. But I am on your mailing list, so I am very shocked that this has gone this far and I have not been provided with information. As you know, information is critical for a proper response. I have been working with different branches. I've spent the last two years working with the Army on the Pohakuloa buildup, which is actually coupled with this in some fashion or form. Again I'm a little bit outraged because I do not have this information. I am grossly unprepared, but I have to try to do something. I have been successful in getting myself on the mailing list. People are aware of me. I've been promised a hard copy because I need the hard copy to make a proper response by your July 10th deadline. Of course when I looked at your timeline, this has been going on for quite some time, and if I had had this information from the start, perhaps I would not feel so intimidated and overwhelmed. One of the things that is extremely important to add into this fray of things is that the environment includes me. I am a part of this environment. The Hawaiian people, the Hawaiian Islands are part of this environment. It is not just the ocean. Secondly, because a lot of this testing that is going to be done or this project that is going to be deployed is going to be done in large part in international waters, and when you talk about in the EIS, it affects many countries -- and I refer to subjects such as RIMPAC -- that other countries also need to be informed of where you are and participate in the EIS process because it affects all the Pacific region. Sorry. You threw me off with that one-minute thing. Please don't hold me to that. As long as we make sure, I'd like to utilize the time. Again I am grossly unprepared. I did not find out about this meeting until last evening. And interestingly enough I went to the Pacific Command to try to get some information, and Google cited it as an unsafe link. That's something that you should be aware of. As I said 12 years ago, the kohola and the nai'a that are the most impacted that have been most frequently (inaudible) are not just large fish. They are my family, my blood, my blood, which can be established through the Kumulipo, the Hawaiian creation chant. I am also a Hiapo Na Koa O Pu'ukohola, or the Warriors from the Mound of the Whale. So we are very familiar with this. We are very, very concerned that a whole lot of things are not being considered. You refer to the larger species of mammals like the porpoises and the whales, but we are island people, and so the effect on smaller fish and the crustaceans and how it affects -- Okay. So you see the problem we have here, not being able to talk about this because how can you possibly do this if you're constantly cut off after three minutes? Thank you, and I want to register my objection. Thank you.	conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is not aware of any documented cases of sonar harming people. Also based on response to comments, Navy has supplemented the discussion regarding hearing loss as a general topic.
Natural	The Navy's compliance with the National Environmental Policy Act ("NEPA"), 42 U.S.C.	The Navy shares your desire to preserve marine life. Based on the

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
Resources Defense Council (NRDC)-1 (Written)	4321 *et seq*., for its training and testing activities in the Pacific Ocean is entering a new phase. For the first time, the Navy is providing a more comprehensive picture of the training and testing activities it is conducting and plans to conduct from January 20 14 to January 20 19 in Hawaii and Southern California waters and the impacts to the environment from those activities. Unfortunately, it is a picture of unprecedented harm: over 14 million instances of "take" (behavioral impacts, harassment, injury) over five years (from January 2014 to January 2019), including almost 3 million instances of temporary hearing loss, over 5,000 instances of permanent hearing loss, almost 3,000 lung injuries, and 1,000 deaths from the use of sonar and explosives. DEIS at 3.4-167 to 168; 3.4-171 to 172. While these predictions of injury are shocking - and, we believe, still underestimate the harm to marine mammals from the Navy's activities they confirm what stranding events have evidenced, scientists have studied, and the public has believed for years: Navy training and testing activities endanger whales and dolphins at intolerable levels.	analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. An integrated monitoring plan for the activities in the HSTT Study Area is also planned as presented in Section 5.5.1.1 (Integrated Comprehensive Monitoring Program) of the EIS/OEIS. In addition, the Navy implements, to the maximum extent practicable, mitigation measures during its training and testing events as developed with NMFS as the regulatory agency under MMPA and ESA. The Navy will continue to implement the monitoring and research programs where training has been occurring to determine if there are identified impacts as a result of those activities and will do so in the HSTT Study Area associated with future training occurring there. The Navy will continue to be a leader in funding of research to better understand the potential impacts of Navy training activities and to operate with the least possible impacts while meeting training and testing requirements.
NRDC - 2	While the scale of impacts does not change the Navy's obligations under NEPA, it highlights why it so important that the Navy's DEIS fully comply with both the letter and spirit of the law. As Congress intended when it passed NEPA, faced with such harm, the DEIS must help decision makers make fully informed decisions on the proposed activities; after reviewing the DEIS, decision makers must understand the breadth of harm to impacted species, must be able to choose a course of action from a range of alternatives that provide options for meeting the Navy's goals while still reducing harm to species, and must have at their disposal a range of mitigation measures that will significantly lessen environmental impacts. For the reasons discussed in detail below, we believe that the DEIS fails to meet these requirements and does so in such a way	The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws. Please see Chapter 2 (Description of Proposed Action and Alternatives), which includes selection criteria and alternatives considered but eliminated (Section 2.5.1 Alternatives Eliminated from Consideration). Please see Chapter 3 (Affected Environment and Environmental Consequences) for the description of the affected environment and environmental consequences of the Navy's Proposed Action. Chapter 4 contains a comprehensive cumulative impacts analysis. Information on mitigation measures can

Table E.3-3: Responses to Comments from Organizations (continued)

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	that the failures cannot be remedied through the issuance of a final EIS. Accordingly, we believe that the document must be thoroughly revised and reissued as a draft for further public review and comment.	be found in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS. Please see *Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis* technical report on the project web site for a discussion of the acoustic impact modeling approach, which addresses the scientifically established criteria for injury, mortality, and harassment under the MMPA.
NRDC - 3	Our overriding concern is the Navy's failure to protect biologically important areas for marine mammals within the Hawaii-Southern California Training and Testing ("HSTT") Study Area. There is a general consensus among the scientific community, as NOAA has recognized, that "[p]rotecting marine mammal habitat is ...the most effective mitigation measure currently available" to reduce the harmful impacts of midfrequency sonar on marine mammals(2) Nonetheless, other than a relatively small "cautionary area" for humpback whales off Hawaii, the DEIS does not consider establishing any additional protection zones in the HSTT Study Area where training or testing could be limited or excluded, despite the common-sense efficacy of such measures. (2) See Letter from Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere to Nancy Sutley, Chair, Council on Environmental Quality dated Jan. 19,2010, available at http://www.nrdc.org/medialdocsll00119.pdf; see also Agardy, T., Aguilar Soto, N., Cafiadas, A., Engel, M., Frantzis, A., Hatch, L., Hoyt, E., Kaschner, K., LaBrecque, E., Martin, V., Notarbartolo di Sciara, G., Pavan, G., Servidio, A., Smith, B., Wang, J., Weilgart, L., Wintle, B., and Wright, A. A global scientific workshop on spatio-temporal management of noise. Report of workshop held in Puerto Calero, Lanzarote, (June 4-6,2007); ECS Working Group: Dolman, S., Aguilar Soto, N., Notabartolo di Sciara, G., Andre, M., Evans, P., Frisch, H., Gannier, A., Gordon, J., Jasny, M., Johnson, M., PapanicolopuJu, I., Panigada, S., Tyack, P., and Wright, A. Technical report on effective mitigation for active sonar and beaked whales. Working group convened by European Cetacean Society, (2009); OSPAR Commission, Assessment of the environmental impact of underwater noise. OSPAR Biodiversity Series, (2009); Parsons, E.C.M., Dolman, S.J., Wright, A.J., Rose, N.A., and Burns, W.C.G. Navy sonar and cetaceans: just how much does the gun need to smoke before we act? Marine Pollution Bulletin 56: 1248-1257 (2008).	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. The Navy has undertaken consultation with NMFS for the proposed and ongoing activities in the Study Area. The Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy chose the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. The Navy's specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas.
NRDC - 4	The Navy's failure is in stark contrast to both the unprecedented level of harm and the varied activities taking place over such a large area. In all, the HSTT Study Area encompasses over 2 million square nautical miles across the Pacific Ocean from Southern California to the International Date Line, with the majority of training and testing activities focused in an area 1.5 times the size of Texas, about 355,000 nm^2• The Navy's preferred alternative would use many different sources and frequencies of active sonar, including over 25,500 hours from mid-frequency sources every year. DEIS at 3.0-46. These training exercises would also employ a battery of other acoustic sources and explosives detonations in ocean surface and undersea areas, special use airspace, and	The Navy has and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap). This working group has two objectives: First, to create regional cetacean density and distribution maps that are time- and species-specific, using survey data and models that estimate density using predictive environmental factors. With the exception of the Atlantic and Gulf of Mexico, the Navy has considered this information as part of the impact and mitigation assessment process. For the Atlantic and Gulf of

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	training land areas. The Navy's failure is particularly troubling in light of the emerging scientific consensus about biologically important areas in the HSTT Study Area. For the last year and a half, the National Oceanic and Atmospheric Administration ("NOAA") has been guiding the work of two working groups to improve the tools available to agencies, including the Navy, to evaluate and mitigate the impacts of anthropogenic noise on marine mammals. The Working Groups' draft products were recently released and one key product of this effort was the Cetacean Density and Distribution Mapping Working Group's (CetMap) identification of marine mammal "hot spots" in the HSTT Study Area - biologically important areas for marine mammals as evidenced by increases in density and distribution or modeled based on important habitat. Because CetMap's products were not released prior to the completion of the DEIS, the information was not incorporated into the Navy's analysis through the development of reasonable alternatives or examined as possible mitigation measures based on limiting or excluding training and testing activities in these hot spots. The fact that the Navy must analyze this new information and determine how it will impact its development of alternatives and mitigation measures supports a revision of the DEIS, which would place the Navy's analysis of this critical information before the public, giving the public an opportunity to comment thereon.	Mexico, the Navy OPAREA Density Estimates on the Spatial Decision Support System for the Strategic Environmental Research and Development Program (available at http://seamap.env.duke.edu/serdp_map.php), are still considered the best available data (Read and Halpin 2010[1]). Second, and separately, to augment the more quantitative density mapping and provide additional context for impact analyses, the CetMap also identifies areas of specific importance for cetaceans, such as reproductive areas, feeding areas, migratory corridors, and areas in which small or resident populations are concentrated, otherwise referred to as “biologically important areas.” The working group determined that "hot spots" is not an appropriate term and chose to call them Biologically Important Areas. Biologically important areas information was based largely on observational data of animals exhibiting biologically important behaviors. The biologically important areas were only characterized for species, areas, and seasons where there were enough data to support the biologically important areas identification within the U.S. Exclusive Economic Zone. Most of these assessments are not based on CetMap density work products but on published and often unpublished data held by individual researchers. They only characterized the observational data available and did not use density or habitat-based models to determine the biologically important areas. Biologically important areas are not being designated by CetMap for the purpose of identifying areas off limit to human activities like sonar. Instead, information is being collected to provide additional context within which to examine potential interactions between cetaceans and human activities. This information can assist resource managers with planning, analyses, and decisions regarding how to reduce adverse impacts to cetaceans resulting from human activities. Some preliminary draft results are currently being released on http://cetsound.noaa.gov/important.html. The CetMap Working Group is also undertaking external review of the documents by subject matter experts outside National Oceanic and Atmospheric Administration and is preparing a collection of manuscripts focused on the biologically important areas that will be submitted to a scientific journal for external peer review by subject matter experts. The Navy also recommended to NMFS that a formal expert elicitation on biologically important areas results be conducted, including data

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		review by a larger body of marine scientists and stakeholders. When appropriate, NMFS provides draft CetMap information for Navy consideration. As part of the ESA and MMPA processes, NMFS requested the Navy to consider some specific preliminary draft areas as part of its mitigation analysis. As of the date of publication of the Final EIS/OEIS, this process is still ongoing; however, the results will be summarized in the Navy's Record of Decision and in NMFS Biological Opinion. If additional biologically important areas are identified by NMFS after the Navy's Record of Decision, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in those areas. [1] Read, A. J. and P. Halpin. 2010. Predictive Spatial Analysis of Marine Mammal Habitats. Final Report. SERDP Project SI-1390. January 2010. 292 pp.
NRDC - 5	As you know, NEPA requires the Navy to employ rigorous standards of environmental review, including a full explanation of potential impacts, a comprehensive analysis of all reasonable alternatives, a fair and objective accounting of cumulative impacts, and a thorough description of measures to mitigate harm. Unfortunately, the DEIS released by the Navy falls far short of these mandates and fails to satisfy the Navy's legal obligations under NEPA. Thus, the Navy must revise the environmental impacts, alternatives, cumulative impacts and mitigation analysis in the DEIS (described in detail in Appendix A) and reissue the document for public review and comment. It must also fully address the considerable scientific record that has developed around sonar and whale injury and mortality, and adjust its acoustic impacts analysis and assessment model accordingly (discussed in Appendices B and C).	The Navy complies with all applicable environmental laws, including NEPA. As such, the Navy has developed this EIS/OEIS to meet the requirements of these laws. Please see Chapter 2 (Description of Proposed Action and Alternatives), which includes selection criteria and alternatives considered but eliminated (Section 2.5.1, Alternatives Eliminated from Consideration). Please see Chapter 3 (Affected Environment and Environmental Consequences) for the description of the affected environment and environmental consequences of the Navy's Proposed Action. Chapter 4 contains a comprehensive cumulative impacts analysis. Information on mitigation measures can be found in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS. Please see *Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis* technical report on the project web site for a discussion of the acoustic impact modeling approach, which addresses the scientifically established criteria for injury, mortality, and harassment under the MMPA. For a complete analysis of stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/.
NRDC - 6	The Navy Has Not Taken a "Hard Look" Under NEPA NEPA requires that the potential environmental impacts of any "major Federal actions significantly affecting the quality of the human environment" be considered through the preparation of an environmental impact statement ("EIS"). Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989); 42 U.S.C. § 4332. The fundamental purpose	The EIS/OEIS has taken a "hard look" at potential environmental consequences of the Proposed Action and alternatives, and provides sufficient information for careful agency decision-making. The Navy considered the best available science in preparation of this EIS/OEIS and is in consultation with NMFS as the regulator and a

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	of an EIS is to compel decision-makers to take a "hard look" at a particular action - both at the environmental impacts it will have and at the alternatives and mitigation measures available to reduce those impacts - before a decision to proceed is made. 40 C.F.R. §§ l500.l(b), 1502.1; Baltimore Gas & Electric v. NRDC, 462 U.S. 87,97 (1983); Robertson, 490 U.S. at 349. While NEPA "does not commend the agency to favor an environmentally preferable course of action," an agency may only make a decision to proceed after taking a "hard look" at environmental consequences. Sabine River Auth. v. Dep't of Interior, 951 F.2d 669, 676 (5th Cif. 1992)(internal citations omitted).	cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.
NRDC - 7	As the DEIS makes clear, the proposed activities pose a significant risk to whales, fish, and other wildlife that depend on sound for breeding, feeding, navigating, and avoiding predators-in short, for their survival. Under every Alternative, the Navy would employ mid-frequency active sonar, which has been implicated in mass injuries and mortalities of whales around the globe.[4] The same technology is known to affect marine mammals in countless other ways, inducing panic responses, displacing animals, and disrupting crucial behavior such as foraging. In addition, the Navy's training and testing with explosives will kill wildlife and leave animals with permanent injuries to their internal organs. The Navy expects to take more than 40 different species of marine mammals, including 7 species listed as endangered or threatened under the Endangered Species Act ("ESA"). DEIS at 3.4-2 to I 1. The Pacific Fleet's training and testing activities would also affect fisheries and essential fish habitat, injure tens of thousands of sea turtles, and release a large amount of hazardous and expended materials into the waters. See Appendices A and B for a detailed discussion of impacts. Footnote 4.. Military sonar generates intense sound that can induce a range of adverse effects in whales and other species - from significant behavioral changes to injury and death. The most widely reported and dramatic of these events are the mass strandings of beaked whales and other marine mammals that have been associated with military sonar use. A brief summary of the stranding record appears in Appendix B.	The Navy shares your desire to preserve marine life. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a species-level risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. An integrated monitoring plan for the activities in the HSTT Study Area is also planned as presented in Section 5.5.1.1 (Integrated Comprehensive Monitoring Program) of the EIS/OEIS. In addition, the Navy implements, to the maximum extent practicable, mitigation measures during its training and testing events as developed with NMFS as the regulatory agency under MMPA and ESA. The Navy will continue to implement the monitoring and research programs where training has been occurring to determine if there are identified impacts as a result of those activities and will do so in the HSTT Study Area associated with future training occurring there. The Navy will continue to be a leader in funding of research to better understand the potential impacts of Navy training activities and to operate with the least possible impacts while meeting training and testing requirements.
NRDC - 8	While the Navy has made progress in assessing the impacts its activities have on the environment, it continues to underestimate harm by disregarding a great deal of relevant information and using approaches that are the opposite of precautionary when factoring uncertainty. As discussed in Appendix C, in revising its DEIS, the Navy must adjust its thresholds for impact and modeling by incorporating the considerable scientific record showing that impacts are even greater than the Navy estimates.	The criteria and thresholds for determining potential effects to marine species used in the HSTT EIS/OEIS and related consultation documents were carefully revised from that used in previous Navy EISs based on best available science, which included lowering the thresholds over much of the hearing range of many species of marine mammals. This included revising the permanent threshold shift threshold for all marine mammal species based on best available science.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 9	The Navy Fails to Identify and Analyze Reasonable Alternatives As you are aware, both of the Navy's action alternatives (Alternative 1 and 2) would dramatically increase the amount of training and testing in Hawaii and Southern California and subject marine mammals to an unprecedented level of harm, including death, lung injuries, gastro-intestinal injuries, hearing loss, and significant behavioral reactions like habitat abandonment. Neither alternative presents an option that would significantly reduce the predicted harm to the marine environment and wildlife. For example, both of the Navy's alternatives result in the exact same number of marine mammal takes from training with sonar - over 2.5 million per year. For training then, the DEIS offers no alternative for a decision maker wishing to reduce the harm to marine mammals.	The differences between Alternatives 1 and 2 are detailed in Sections 2.7 (Alternative 1: Expansion of the Study Area Plus Adjustments to the Baseline and Additional Weapons, Platforms, and Systems) and 2.8 (Alternative 2: Includes Alternative 1 Plus Increased Tempo of Training and Testing Activities) of the Final EIS/OEIS. The Navy developed the alternatives considered in this EIS/OEIS after careful assessment of the Navy's training and testing requirements by subject matter experts, including military units and commands that perform the training and testing, and Navy environmental managers and scientists. A reduction in training and testing activities would fail to meet the Purpose and Need and would not allow the Navy to meet its obligations under Title 10 of the United States Code. Refer to Section 2.5 (Alternatives Development) of the Final EIS/OEIS for an explanation of the development of alternatives.
NRDC - 10	It is obvious that the Navy's alternatives were not selected to "inform decision-makers and the public" of how it could "avoid or minimize adverse impacts or 'enhance the quality of the human environment." 40 C.F.R. § 1502.1. While the Navy purportedly presents two reasonable alternatives, it leaves no room for decision makers to choose anything but its preferred alternative, which "is contingent upon [and allows for] potential budget increases, strategic necessity, and future training and testing requirements." DEIS at ES-8; 2-74 (emphasis added). A decision maker that wishes to meet the Navy's needs is compelled to choose the preferred alternative. In addition, even if Alternative I also met the Navy's strategic necessity and future training and testing requirements and a decision maker felt free to considering choosing it over the Navy's preferred alternative, he or she would be hard pressed to identify which alternative works to avoid or minimize adverse environmental impacts, let alone enhance the quality of the human environment. Both alternatives inflict an unprecedented amount of harm on marine life. Neither alternative was developed with an eye to minimizing adverse environmental impacts, but instead reflect differences entirely unrelated to the proposed action's environmental impacts. Such differences in capabilities, tempo, and locations are entirely based on operational needs, not on factors related to environmental impacts. As such, they fail to provide the public and decision makers with any options for significantly limiting the impact to marine wildlife. The development of alternatives in this manner violates NEPA, reflecting a classic post hoc rationalization for a decision unlawfully made before environmental impacts and reasonable alternatives were considered.	The EIS/OEIS reviewed potential environmental consequences (Chapter 3, Affected Environment and Environmental Consequences) of the Proposed Action and alternatives, and provides sufficient information for careful agency decision making. The Navy attempted to establish alternatives based on geographical alternatives (Section 2.5.1, Alternatives Eliminated From Further Consideration and Section 5.2.2.1, Lessons Learned from Previous Environmental Impact Statements/Overseas Environmental Impact Statements), but this approach proved to not be feasible. The Navy is not obligated by NEPA to consider alternatives that are not feasible. Therefore, the only reasonable alternatives for the Navy to consider to meet its purpose and need must differ in training tempo, capabilities, and locations. The alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. The selection of an alternative by the decision maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. Most impacts from the Proposed Action are expected to be brief and recoverable. Long-term impacts to a small number of individuals are not expected to have long-term population consequences.
NRDC - 11	In addition, even if Alternative I also met the Navy's strategic necessity and future training and testing requirements and a decision maker felt free to considering choosing	The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	it over the Navy's preferred alternative, he or she would be hard pressed to identify which alternative works to avoid or minimize adverse environmental impacts, let alone enhance the quality of the human environment. Both alternatives inflict an unprecedented amount of harm on marine life. Neither alternative was developed with an eye to minimizing adverse environmental impacts, but instead reflect differences entirely unrelated to the proposed action's environmental impacts. Such differences in capabilities, tempo, and locations - are entirely based on operational needs, not on factors related to environmental impacts. As such, they fail to provide the public and decision makers with any options for significantly limiting the impact to marine wildlife. The development of alternatives in this manner violates NEPA, reflecting a classic post hoc rationalization for a decision unlawfully made before environmental impacts and reasonable alternatives were considered.	in Sections 2.5 through 2.8 and explains why the Navy has considered but eliminated alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) includes mitigation measures designed to reduce potential impacts.
NRDC - 12	The Navy Fails to Consider Effective Mitigation There is general consensus that protection areas - in which the use of mid-frequency sonar would not occur - represent the most effective means currently available to reduce the impacts of mid-frequency sonar on marine mammals.[5] In 2010, the National Oceanic Atmospheric Administration ("NOAA") completed a review of the Navy's sonar mitigation. It concluded that "ongoing mitigation efforts, in our view, must do more" to address uncertainties and protect marine mammals.[6] Nonetheless, the Navy's OEIS proposes the same mitigation scheme that NOAA found lacking. While NOAA emphasized the importance of habitat identification and avoidance, stating that "[p]rotecting important marine mammal habitat is generally recognized to be the most effective mitigation measure currently available," the Navy makes no provision for protecting areas in the HSTT Study Area in addition to the limited area for humpback whales.?	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train for real-world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas.
NRDC - 13	Appendix A contains a detailed description of mitigation measures that the Navy can and should - adopt.	Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train and test for real world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas. The Navy is in consultation with NMFS as the regulator and a cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.
NRDC - 14	At a minimum, however, the Navy must assess the value of marine mammal habitat in the HSTT Study Area and protect any higher-value areas identified.	The mitigation measures identified throughout Chapter 5 will apply to protect all marine mammals year round, and will be applied regardless of the location of the activity. In 2012, the CetMap panel of experts determined that no biologically important areas could be identified based on data availability and information at hand. Furthermore, no follow-on products have identified areas of recommended avoidance. It is important to note that the areas appearing on the CetMap website are a preliminary draft that needs considerable additional input from the larger biological community before being used to identify biologically important areas in the ocean.
NRDC - 15	As noted, NOAA recently completed a series of workshops designed to learn more about marine mammal "hot spots." The results of these workshops are now available and the Navy must assess the information and develop mitigation measures based on protecting important marine mammal habitat. To offer full protection to the marine mammals found in these "hot spots," the Navy should develop mitigation measures that bar the use of sonar in the areas and provide a buffer for them that limits the received level of sound. At a minimum, the Navy should establish cautionary areas in these habitats.	The Navy has and will continue to support the Cetacean and Sound Mapping project, including providing representation on the Cetacean Density and Distribution Mapping Working Group (CetMap). This working group has two objectives. First, to create regional cetacean density and distribution maps that are time- and species-specific, using survey data and models that estimate density using predictive environmental factors. With the exception of the Atlantic and Gulf of Mexico, the Navy has considered this information as part of the impact and mitigation assessment process. For the Atlantic and Gulf of Mexico, the Navy OPAREA Density Estimates on the Spatial Decision Support System for the Strategic Environmental Research and Development Program (available at http://seamap.env.duke.edu./serdp/serdp_map.php), are still considered the best available data (Read and Halpin 2010[1]). Second, and separately, to augment the more quantitative density mapping and provide additional context for impact analyses, the CetMap is also identifying areas of specific importance for cetaceans, such as reproductive areas, feeding areas, migratory corridors, and areas in which small or resident populations are concentrated, otherwise referred to as “biologically important areas.” The working group determined that "hot spots" is not an appropriate term and chose to call them Biologically Important Areas. Biologically important areas information was based largely on observational data of animals exhibiting biologically important behaviors. The biologically important areas were only characterized for species, areas, and seasons where there were enough data to support the biologically important areas

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		identification within the U.S. Exclusive Economic Zone. Most of these assessments are not based on CetMap density work products but on published and often unpublished data held by individual researchers. They only characterized the observational data available and did not use density or habitat-based models to determine the biologically important areas. Biologically important areas are not being designated by CetMap for the purpose of identifying areas off limit to human activities like sonar. Instead, information is being collected to provide additional context within which to examine potential interactions between cetaceans and human activities. This information can assist resource managers with planning, analyses, and decisions regarding how to reduce adverse impacts to cetaceans resulting from human activities. Some preliminary, draft results are currently being released on http://cetsound.noaa.gov/important.html. The CetMap Working Group is also undertaking external review of the documents by subject matter experts outside National Oceanic and Atmospheric Administration and is preparing a collection of manuscripts focused on the biologically important areas that will be submitted to a scientific journal for external peer review by subject matter experts. The Navy also recommended to NMFS that a formal expert elicitation on biologically important areas results be conducted, including data review by a larger body of marine scientists and stakeholders. When appropriate, NMFS provides draft CetMap information for Navy consideration. As part of the ESA and MMPA processes, NMFS requested the Navy to consider some specific preliminary draft areas as part of its mitigation analysis. As of the date of publication of the Final EIS/OEIS, this process is still ongoing; however, the results will be summarized in the Navy's Record of Decision and in NMFS Biological Opinion. If additional biologically important areas are identified by NMFS after the Navy's Record of Decision, the Navy and NMFS will use the Adaptive Management process to assess whether any additional mitigation should be considered in those areas. [1] Read, A. J. and P. Halpin. 2010. Predictive Spatial Analysis of Marine Mammal Habitats. Final Report. SERDP Project SI-1390. January 2010. 292 pp.
NRDC - 16	Conclusion Our organizations recognize the Navy's important role in ensuring national security. We also value the security a clean and healthy environment provides. National security and environmental integrity are not mutually exclusive, and we encourage the Navy to train and test in ways that protect Hawaii's and Southern California's valuable	The Navy complies with all applicable environmental laws, including NEPA. The EIS/OEIS has taken a "hard look" at potential environmental

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	natural resources. Thus, for the reasons set forth above and in greater detail in the Appendices below and attached critique by Dr. David Bain, we urge the Navy to satisfy its obligations under NEPA and other applicable laws by revising its DEIS, taking a "hard look" at impacts and identifying and analyzing reasonable alternatives and mitigation measures that will significantly reduce the impact to the marine environment.[8] Upon revision the DEIS should be released to the public for review and comment.	consequences of the Proposed Action and alternatives, and provides sufficient information for careful agency decision-making. The Navy considered the best available science in preparation of this EIS/OEIS and is in consultation with NMFS as the regulator and a cooperating agency with regard to the Proposed Action, the potential environmental impacts, and any resultant mitigation measures as conditions of anticipated authorizations under the MMPA or reasonable and prudent measures resulting from issuance of a Biological Opinion under ESA.
NRDC - 17	APPENDIX A As set forth below, the Navy's DEIS does not meet the rigorous standards set forth in the National Environmental Policy Act. We urge the Navy to revise and then reissue its DEIS, substantially altering the approach it has taken thus far. The Navy's scope of review must be expanded, its alternatives analysis broadened, its mitigation plan significantly improved, and its impact assessment revised to reflect the scientific evidence of mid-frequency sonar's effects on marine life. These critical steps must be undertaken if the Navy's EIS is to comply with federal law. I. Legal Framework: The National Environmental Policy Act The National Environmental Policy Act of 1969 ("NEPA") "declares a broad national commitment to protecting and promoting environmental quality." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). NEPA establishes a national policy to "encourage productive and enjoyable harmony between man and his environment" and "promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 42 U.S.C. § 4321. In order to achieve its broad goals, NEPA mandates that "to the fullest extent possible" the "policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with [it]." 42 U.S.C. § 4332. Central to NEPA is its requirement that, before any federal action that "may significantly degrade some human environmental factor" can be undertaken, agencies must prepare an EIS. Steamboaters v. F.E.R.C., 759 F.2d 1382, 1392 (9th Cir. 1985) (emphasis in original). The requirement to prepare an EIS "serves NEPA's action-forcing purpose in two important respects." Robertson, 490 U.S. at 349. First, "the agency, in reaching its decision, will have available, and will carefully consider. detailed information concerning significant environmental impacts[,]" and second, "the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." Id. (emphasis added). As the Supreme Court explained: "NEPA's instruction that all federal agencies comply with the impact statement requirement. .. 'to the fullest extent possible' [cit. omit.] is neither accidental nor hyperbolic. Rather the phrase is a deliberate command that the duty NEPA imposes upon the agencies to consider environmental factors not be shunted aside in the	As explained above, the Navy's statement of the purpose and need for the Proposed Action is detailed and specific, the scope of the Proposed Action is described in exhaustive detail after careful assessment of training and testing requirements, and the alternatives have been developed in accordance with NEPA standards. The EIS/OEIS is the product of extensive analysis applying best available science, including methodologies for analyzing impacts of mid-frequency active sonar on marine mammals that were developed in close consultation with NMFS, a cooperating agency in the development of this EIS/OEIS, the recognized experts in the marine environment, and the agency designated by law under the MMPA with jurisdiction over the protection of the marine environment. The Navy has developed, refined and adopted mitigation measures to address environmental impacts in every affected resource area, and has identified any unavoidable impacts of the Proposed Action. The Navy has further conducted an appropriate analysis of cumulative effects of its Proposed Action. The EIS/OEIS takes a "hard look" at potential environmental consequences of the Proposed Action and alternatives, and provides sufficient information for careful agency decision-making.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	bureaucratic shuffle." Flint Ridge Development Co. v. Scenic Rivers Ass'n, 426 U.S. 776, 787 (1976). The fundamental purpose of an EIS is to force the decision-maker to take a "hard look" at a particular action - at the agency's need for it, at the environmental consequences it will have, and at more environmentally benign alternatives that may substitute for it before the decision to proceed is made. 40 C.F.R. §§ 1500.I(b), 1502.1; Baltimore Gas & Electric v. NRDC, 462 U.S. 87,97 (1983). This "hard look" requires agencies to obtain high quality information and accurate scientific analysis. 40 C.F.R. § 1500.1 (b). "General statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided." Klamath-Siskiyou Wilderness Center v. Bureau of Land Management, 387 F.3d 989, 994 (9th Cir. 2004) (quoting Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1380 (9th Cir. 1998». The law is clear that the EIS must be a pre-decisional, objective, rigorous, and neutral document, not a work of advocacy to justify an outcome that has been foreordained. In nearly every respect, despite the length and information provided, the Navy's DEIS fails to meet the high standards of rigor and objectivity required under NEPA. The Navy has failed to conduct the "hard look" necessary to thoroughly examine the many environmental consequences of its proposed action.	
NRDC - 18	The Navy Fails to Properly Analyze Impacts on Marine Mammals The Navy's OEIS does not properly analyze environmental impacts. Despite the unprecedented level of harm the Navy predicts, its analysis nonetheless understates the potential effects of its training and testing activities on marine wildlife and fails to acknowledge risks posed to a wide range of marine species from its activities. The DEIS concludes that no "marine mammal strandings or mortality will result from the operation of sonar or other acoustic sources during Navy exercises within the Study Area." DEIS at 3.4-152. The Navy reaches this conclusion despite acknowledging the importance of sound to marine mammal existence and the hundreds of thousands of instances of hearing loss its activities will inflict on marine mammals. For example, the Navy states that "it is likely that a relationship between the duration, magnitude, and frequency range of hearing loss could have consequences to biologically important activities (e.g., intraspecific communication, foraging, and predator detection) that affect survivability and reproduction." OEIS at 3.4-97 to 98. The Navy's statements are clearly contradictory; on the one hand the Navy states that a connection between survivability and hearing loss is likely, which must be placed in the context of its prediction of 3 million instances of temporary hearing loss, while on the other it concludes that no mortality will result from the use of sonar. The Navy's conclusions are unsupported by its own analysis. Finally, as discussed in detail in Appendix C and the attached critique by Dr. David Bain, the Navy's assessment of acoustic impacts is also highly problematic and	The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS, using the most current, relevant scientific information. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but the resulting estimates must then be analyzed in context of the limitations of that modeling. Since the Draft EIS/OEIS was released, adjustments were made to the quantified results of the marine mammal acoustic effects analysis. These changes were presented in the Navy's Letter of Authorization application to NMFS and are reflected in this Final EIS/OEIS. Modifications to the requested take numbers outlined in the Draft EIS/OEIS were presented in the Proposed Rule and are a result of consultation with NMFS, as well as refinements to training and testing modeling inputs and minor changes to Navy training and testing as a result of emerging requirements. In consultation with NMFS, the Navy made post-model adjustments to further refine the numerical analysis of acoustic effects so as to include by considering animal avoidance of sound sources, avoidance of areas of activity before use of a sound source or explosive, and implementation of mitigation. Section 3.4.3.1.5.5 (Marine Mammal Avoidance of Sound Exposures) and Section 3.4.3.1.5.6 (Implementing Mitigation to Reduce Sound Exposures), describes in detail the post-model

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	likely underestimates the impacts to marine mammals.	adjustments made to further refine the numerical analysis of acoustic effects. Also based on response to comments, Navy has supplemented the discussion regarding hearing loss as a general topic. With regard to the critique by Dr. David Bain, this same critique was provided as comment on the 2009 HRC EIS/OEIS so was certainly considered in the development of the present HSTT EIS/OEIS. As noted in response then and presented in the current document, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts.
NRDC - 19	Acoustic Impacts on Marine Mammals NEPA requires agencies to ensure the "professional integrity, including scientific integrity," of the discussions and analyses that appear in EISs. 40 C.F.R. § 1502.24. To that end, they must make every attempt to obtain and disclose data necessary to their analysis. See 40 C.F.R. § IS02.22(a). Agencies are further required to identify their methodologies, indicate when necessary information is incomplete or unavailable, acknowledge scientific disagreement and data gaps, and evaluate indeterminate adverse impacts based upon approaches or methods "generally accepted in the scientific community." 40 C.F.R. §§ 1502.22(2), (4), 1502.24. Such requirements become acutely important in cases where, as here, so much about a program's impacts depend on newly emerging science. In this case, the Navy's assessment of impacts is consistently undermined by its failure to meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. As set forth in greater detail in Appendix C and the attached critique by Dr. Bain, the DEIS disregards a great deal of relevant information adverse to the Navy's interests, uses approaches and methods that would not be acceptable to the scientific community, and ignores whole categories of impacts. In short, it leaves the public with an analysis of harm-behavioral, auditory, and physiological-that is at odds with established scientific authority and practice. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA.	The marine mammal acoustical analysis is based on the use of the best available science (see Section 3.4, Marine Mammals) as it applies to mid-frequency and high-frequency sources used during training and testing in the HSTT Study Area. The Navy has been thorough in its use of all relevant data and studies available on the marine environment as required by NEPA.
NRDC - 20	Other Impacts on Marine Mammals The activities proposed for the HSTT Study Area may have impacts that are not limited to the effects of ocean noise. Unfortunately, the Navy's analysis of these other impacts is cursory and inadequate. First, the Navy fails to adequately assess the impact of stress on marine mammals, a serious problem for animals exposed even to moderate levels of sound for extended periods.[9] DEIS at 3.4-99 to 100. As the Navy has previously	Exposure to mid or high frequency active sonar will not result in a chronic noise environment in the HSTT Study Area. Sonar pings are brief and intermittent with an animal exposed at most approximately two times a minute for several minutes if the animal is undetected by Navy Lookouts. Given the manner in which sonar is typically used, and the movement of the participants, it is extremely unlikely that individual animals would be exposed to sonar long enough for stress or injury to

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	observed, stress from ocean noise-alone or in combination with other stressors, such as biotoxins-may weaken a cetacean's immune system, making it "more vulnerable to parasites and diseases that normally would not be fatal."[10] Moreover, according to studies on terrestrial mammals, chronic noise can interfere with brain development, increase the risk of myocardial infarctions, depress reproductive rates, and cause malformations and other defects in young-all at moderate levels of exposure. I t Because physiological stress responses are highly conservative across species, it is reasonable to assume that marine mammals would be subject to the same effects and recent research is bearing this out. A study of North Atlantic right whales produced evidence showing that exposures to low-frequency ship noise may be associated with chronic stress in whales. 12 For the Navy, Stich studies should be particularly relevant when assessing impacts on those marine mammal populations that are subjected to stress inducing impacts from training and testing activities on a regular basis. Nonetheless, despite the potential for stress in marine mammals and the significant consequences that can now from it, the Navy unjustifiably assumes that such effects would be minimal. <J See National Research Council, Ocean Noise and Marine Mammals. 10 Navy, Hawaii Range Complex Draft Environmental Impact Statement! Overseas Environmental Impact Statement at 5-19 to 5-20 (2007). Additional evidence relevant to the problem of stress in marine mammals is summarized in A.J. Wright, N. Aguilar Soto. A.L. Baldwin, M. Bateson, C.M. Beale, C.Clark, T. Deak, E.F. Edwards, A. Fernandez, A. Godinho, L. Hatch, A. Kakuschke, D.Lusseau, D. Martineau, L.M. Romero, L. Weilgart, B. Wintle, G. Notarbartolo di Sciara, and V. Martin, Do marine mammals experience stress related to anthropogenic noise?, 20 International Journal of Comparative Psychology, 274-316 (2007): see also T.A. Romano, M.J. Keogh, C. Kelly, P. Feng, L. Berk, C.E. Schlundt, D.A. Carder, and 1.1. Finneran, Anthropogenic Sound and Marine Mammal Health: Measures of the Nervous and Immune Systems Before and After Intense Sound Exposure, 61 Canadian Journal of Fisheries and Aquatic Sciences 1124, 1130-31 (2004). 11 See, e.g., E.F. Chang and M.M. Merzenich, Environmental Noise Retards Auditory Cortical Development, 300 Science 498 (2003) (rats); S.N. Willich, K. Wegscheider, M. Stallmann, and T. Keil, Noise Burden and the Risk of Myocardial Infarction, European Heart Journal (2005) (Nov. 24,2005) (humans); F.H. Harrington and A.M. Veitch, Calving Success of Woodland Caribou Exposed to Low Level Jet Fighter Overflights, 45 Arctic vol. 213 (1992) (caribou) 12 R. M. Rolland, S. E. Parks, K. E. Hunt. M. Castellote. P. J. Corkeron, D. P. Nowacek. S. K. Wasser, and S. D. Krauss. 2012. "Evidence That Ship Noise Increases Stress in Right Whales." Proceedings of the Royal Society of Biology. 10. 1098/rspb.2011.2429.	occur. Studies of odontocetes chased during purse seining of tuna showed stress effects when pursued for long periods (30-40 minutes) but most of those animals recovered (Edwards 2007 International Journal of Comparative Psychology, 20: 217-227). Since the impact from noise exposure and the Navy training and testing events in general should be transitory given the movement of the participants, any stress responses should be short in duration and have less than biologically significant consequences.
NRDC - 21	Second, in the course of its training activities, the Navy would release a host of toxic chemicals, hazardous materials and waste into the marine environment that could pose a threat to marine mammals over the life of the range. For example, under its preferred alternative, the Navy plans to abandon approximately 370,000 pounds of potentially toxic	This statement is inaccurate. Chapter 3.1 (Sediments and Water Quality) did not state that 370,000 pounds of potentially toxic metals would be abandoned. The chapter concludes that chemical, physical, or biological changes to sediment or water quality would be

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	metals in HSTT Study Area waters. DEIS at 3.1-44 to 45. Nonetheless, the OEIS fails to adequately consider the cumulative impacts of these toxins on marine mammals from past, current, and proposed training exercises. Careful study is needed into the way toxins might disperse and circulate within the area and how they may affect marine wildlife.	measurable but below applicable standards, regulations, and guidelines, and would be within existing conditions or designated uses. Neither state nor federal standards or guidelines would be violated.
NRDC - 22	The Navy's assumption that expended materials and toxics would dissipate or become buried in sediment leads to a blithe conclusion that releases of hazardous material would have no adverse effects. Given the amount of both hazardous and nonhazardous materials, this discussion is inadequate under NEPA.	The EIS/OEIS document presents a thorough description and analysis in Section 3.1.3 (Environmental Consequences) of amounts and types of specific training materials as well as chemical composition and breakdown processes of expended materials. Based on the best available science, the impact of explosives, explosion byproducts, and metals on sediment and water quality would be both short- and long-term, and localized. Chemical, physical, or biological changes in sediment or water quality would be measurable, but below applicable standards and guidelines, and would be below or within existing conditions or designated uses. The impact of chemicals other than explosives and other materials on sediment and water quality would be both short- and long-term, and localized. Chemical, physical, or biological changes in sediment or water quality would not be detectable, and would be below or within existing conditions or designated uses. Therefore, no water or sediment toxicity would occur, so no adverse effects on marine organisms would be expected.
NRDC - 23	In addition, the Navy also plans to abandon cables, wires, and other items that could entangle marine wildlife, including more than 67,000 parachutes. DEIS at 3.3-26. Acknowledging that entanglement is a serious issue for marine mammals (e.g., "From 1998-2005, based on observer records, five fin whales (CA/OR/WA stock), 12 humpback whales (Eastern North Pacific stock), and six sperm whales (CA/OR/WA stock) were either seriously injured or killed in fisheries off the mainland West Coast of the U.S." DEIS at 3.4-250), the DEIS nonetheless dismisses the threat posed by abandoning 67,000 parachutes, claiming without support that a marine mammal that did become entangled could easily become free. DEIS at 255. Again, this discussion and analysis is inadequate under NEPA.	The studies regarding marine mammal entanglement involve primarily fishing gear, which include items designed to ensnare and result in entanglement. Unlike typical fishing nets and lines, the Navy's equipment is not designed for trapping or entanglement purposes. The Navy deploys equipment designed for military purposes and strives to reduce the risk of accidental entanglement posed by any item it releases into the sea.
NRDC - 24	Third, the Navy fails to consider the risk of ship collisions with large cetaceans, as exacerbated by the use of active acoustics. For example, right whales have been shown to engage in dramatic surfacing behavior, increasing their vulnerability to ship strikes, on exposure to mid-frequency alarms above 133 dB re 1 μPa (SPL)-a level of sound that can occur many tens of miles away from the sonar systems slated for the range. 13 It should be assumed that other large whales (which, as the OEIS repeatedly notes, are	Ship strikes were discussed in the Draft EIS/OEIS, Section 3.4.3.3.1 (Impact from Vessels). Results of the research by Nowacek et al (2004) where right whales reacted to an "alert stimuli," used a sound source that was designed to cause a reaction in right whales and has almost no correlation to any sound source used by the U.S. Navy. The results of the Nowacek et al (2004) study were not used in the Navy's

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	already highly susceptible to vessel collisions) are subject to the same hazard. As the Navy notes, "[v]essel strikes from commercial, recreational, and Navy vessels are known to affect large whales in the HSTT Study Area and have resulted in serious injury and occasional fatalities to cetaceans." DEIS at 3.4-235. And while the Navy analyzes the threat of ship strikes generally (DEIS at 3.4-234 to 245), it uses a basic probability calculation as opposed to the kind of modeling for take that it uses for other impacts (e.g., acoustic sources), which can underestimate the impact from ship strikes.	ship strike analysis; however, the results were used to develop the risk function from which the quantification of predicted exposures was derived. With regard to the vessel strike calculations, those were done using years of National Oceanic and Atmospheric Administration historical strike data to assess the probability of ship strike. The use of historical trend data is considered to be the most accurate means to assess the probability of future strikes since there is no scientific method to otherwise make such an assessment.
NRDC - 25	Fourth, the Navy does not adequately analyze the potential for and impact of oil spills. As evidenced by the 1989 Exxon Valdez oil spill and the 2010 BP Deepwater Horizon disaster, there is a risk of an oil spill in areas where oil is produced and transported, such as areas of Southern California. This risk is exacerbated by increasing the tempo and intensity of Navy training, which will involve more vessels, more transits, and longer missions throughout the HSTT Study Area.[14] In light of this history and the extraordinarily valuable and sensitive natural resources that occur in Southern California, the Navy must evaluate its spill response plan and station salvage equipment accordingly. 14- We note that the Navy should include in its analysis and disclose to the public a chart that shows how its operating areas overlap shipping lanes, recommended routes, and Areas to Be Avoided as an indication of the potential for conflict with other vessels.	The analysis presented in the EIS/OEIS is limited to the activities and reasonable outcomes of such activities. As accidents involving other vessels and oil spills are not reasonably foreseeable, nor anticipated, the impact of such occurrences are not addressed or analyzed. The Navy has plans and procedures for preventing, reporting, and responding to oil spills. Although the number of training and testing activities is likely to increase, multiple activities usually occur from the same vessel, thus increased number of activities is not expected to result in an increase in vessel use or transit.
NRDC - 26	Finally, the Navy's analysis cannot be limited only to direct effects, i.e., effects that occur at the same time and place as the training exercises that would be authorized. 40 C.F.R. § 1508.8(a). It must also take into account the activity's indirect effects, which, though reasonably foreseeable (as the DEIS acknowledges), may occur later in time or are further removed. 40 C.F.R. § 1508.8(b). This requirement is particularly critical in the present case given the potential for sonar exercises to cause significant long-term impacts not clearly observable in the short or immediate term (a serious problem, as the National Research Council has observed). 15 Thus, for example, the Navy must not only evaluate the potential] for mother-calf separation but also the potential for indirect effects-on survivability-that might arise from that transient change. 40 C.F.R. § 1502. 16(b). Without further consideration of these impacts, and mitigation and alternatives developed to address those impacts, the DEIS does not pass NEPA muster. 15 "Even transient behavioral changes have the potential to separate mother-offspring pairs and lead to death of the young, although it has been difficult to confirm the death of the young." National Research Council. Ocean Noise and Marine Mammals at 96.	The potential for indirect effects on marine mammals has been considered in Section 3.4 (Marine Mammals) in developing the methodology for assessing acoustic impacts, and it is thereby acknowledged that direct acoustic harassment of an individual can lead to other, indirect effects. As depicted in Figure 3.0-18, the Navy's analysis considers all potential impacts resulting from exposure to acoustic sources. In figure 3.0-18, the effects are shown in terms of physiological responses, behavioral responses, potential costs to the animal, recovery, and long-term consequences. The likely existence of such effects is accounted for in the estimation of "take" and they are otherwise not predictable or amenable to quantification. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
NRDC - 27	Other Impacts on Wildlife The same concerns that apply to marine mammals - such as injury or death from midfrequency active sonar, collisions with ships, bioaccumulation of toxins, and stress apply to sea turtles, birds and other biota as well. The Navy must adequately evaluate impacts and propose mitigation for each category of harm. 40 C.F.R. §§ 1502.14, 1502.16. The Navy limits its analysis of the effects of mid-frequency active sonar on sea turtles on the grounds that their best hearing range appears to occur below 1 kHz. DEIS at 3.55 to 6; 3.5-40. Nevertheless, even with this limitation, the Navy predicts nearly 8,000 instances of temporary hearing loss for sea turtles, over 700 instances of permanent hearing loss, 65 instances of gastrointestinal injury, and 25 deaths from acoustic sources, like sonar, and explosives over five years. DEIS at 3.5-42; 3.5-47. Given the endangered status of sea turtles, there is little room for error in assessing impacts. While predicting death and permanent injury to members of these species and acknowledging a complete lack of density data for the species in open ocean conditions, the Navy nonetheless concludes that "population level impacts are not expected." DEIS at 3.5-42. Yet such conclusions are made without analyzing the impacts against the specific status of each species, even while acknowledging that many of the species have decreasing long-term population trends (e.g., hawksbill sea turtles at DEIS 3.5-13) and that studies indicate that many populations in the HSTT Study Area may be genetically distinct and require independent management (e.g., green sea turtles at OEIS 3.5-7). The Navy must rigorously analyze predicted impacts against the status of the species in the HSTT Study Area before concluding that no population-level impacts are expected.	The Navy has analyzed potential impacts from ship strikes, bioaccumulation of toxins, and stress on multiple species within the applicable marine resources sections. The Navy has included mitigation measures for each resource within each respective section and within Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring). Regarding sea turtles, while there are some sea turtles that may be able to hear sounds at 1 kHz, there is a very large difference between sounds at 1 kHz and sounds at 3.5 kHz than would be evident in simply looking at the difference between the numbers (a delta of -2.5). Current best available science and all available indications are that they are not likely able to hear mid-frequency sonar. Potential impacts related to bioaccumulation are discussed in the EIS/OEIS in Section 3.4.3.7 (Secondary Stressors). Finally, in the absence of scientific studies, reliance on professional judgment is required. Statements on the behavior of animals contained in the EIS/OEIS are based on the best available science. The Navy consulted with the U.S. Fish and Wildlife Service as appropriate.
NRDC - 28	Nor is the Navy's reasoning with regard to seabirds any more sound. Although the Navy acknowledges that "[t]here is little published literature on the hearing abilities of birds underwater... [and] no measurements of the underwater hearing of any diving birds" (DEIS at 3.6-8), it then inexplicably concludes that "any sound exposures would be minimal and are unlikely to have a long-term impact on an individual or a population." DEIS at 3.6-27. Such reasoning does not bear up to any serious scrutiny. See, e.g., the entirely unsupported assertion that "[s]eabirds would avoid any additional exposures during a foraging dive when they surface" (OEIS at 3.6-24). Seabirds occur in the HSTT Study Area, dive underwater (in some cases to depths of hundreds of feet), and are sensitive to the frequencies used by the Navy's acoustic sources. They must receive further analysis in the DEIS, both for the direct impacts they may suffer on exposure to the Navy's acoustic sources and for the impacts they may incur indirectly through depletion of prey species and hard bottom habitat. 40 C.F.R. § l502.16(a), (b). Without further consideration of these species, the Navy's review is incomplete.	A thorough analysis of acoustic impacts to seabirds appears in Section 3.6.3.1 (Acoustic Stressors) which is based on the best available science. This section addressed deep diving birds. The EIS/OEIS concluded there would be no long-term impacts from sonar to marine habitats (see Section 3.3 [Marine Habitats]) or fish (see Section 3.9 [Fish]), and therefore no indirect impacts are expected for seabirds.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 29	The Navy Failed to Analyze the Impacts on Fish and Fisheries The HSTT Study Area is a highly productive region for fish and invertebrate populations. It supports some of the most productive and commercially important fisheries in the United States (including market squid, pacific sardine, swordfish, and tuna). The HSTT Study Area supports hundreds of other species, many with federally designated essential fish habitat in the Study Area. In its OEIS, the Navy discusses many of the unknowns regarding impacts from training and testing on fish (e.g., "While statistically significant losses were documented in the two groups impacted, the researchers only tested that particular sound level once, so it is not known if this increased mortality was due to the level of the test signal or to other unknown factors." DEIS at 3.9-30), while also acknowledging that "potential impacts on fish from acoustic and explosive stressors can range from no impact brief acoustic effects, tactile perception, and physical discomfort, to slight injury to internal organ and the auditory system do death of the animal" DEIS at 3.9-57. Nonetheless, the DEIS concludes that that its training activities - including both the use of mid-frequency active sonar and underwater detonations - would have no significant impact on fish, fisheries and essential fish habitat. The Navy's conclusion not only contradicts the available scientific literature on noise but also ignores the valid concerns of fishermen. For example, fisherman concerned with declining catch rates wrote letters opposing the Navy's proposal to build an Undersea Warfare Training Range off the coast of North Carolina in 2005. Those fishermen reported sharp declines in catch rates in the vicinity of Navy exercises. Decline in Catch Rates For years, fisheries in various parts of the world have complained about declines in their catch after intense acoustic activities (including naval exercises) moved into the area, suggesting that noise is seriously altering the behavior of some commercial species. A group of Norwegian scientists attempted to document these declines in a Barents Sea fishery and found that catch rates of haddock and cod (the latter known for its particular sensitivity to low-frequency sound) plummeted in the vicinity of an airgun survey across a 1600-square-mile area. In another experiment, catch rates of rockfish were similarly shown to decline. I? Drops in catch rates in these experiments range from 40 to 80 percent. 18 A variety of other species, herring, zebrafish, pink snapper, and juvenile Atlantic salmon, have been observed to react to various noise sources with acute alarm. In their comments On the Navy's Draft Environmental Impact Statement for the proposed Undersea Warfare Training Range off the coast of North Carolina, several fishermen and groups of fishermen independently reported witnessing sharp declines in catch rates of various species when in the vicinity of Navy exercises. - These reports are also indicative of behavioral changes -such as a spatial redistribution of fish within the water column - that could similarly affect the fisheries in the HSTT Study Area. 16 See "'Noisy' Royal Navy Sonar Blamed for Falling Catches," Western Morning News, Apr. 22, 2002 (sonar off the U.K.); Percy J. Hayne, President of Gulf Nova Scotia Fleet	While the EIS/OEIS concludes there will be impacts from the Proposed Action to fish, those impacts do not translate into impacts to socioeconomic resources. Impacts analyzed in the EIS/OEIS consider the individual and the population. Impacts to single individuals do not translate to impacts on the entire population or the resource as a whole. The conclusions presented in the EIS/OEIS are fully supported in the analysis. Concerns of commercial fisherman were addressed in the EIS/OEIS (see Section 3.11.3 [Environmental Consequences]). Favored fishing areas change over time with fluctuations in fish populations and communities, preferred target species, or fishing modes and styles. Declines in fishing rates can be attributed to several factors both natural and anthropogenic. Section 3.9 (Fish) concluded no long-term impacts to fish populations are anticipated, therefore, Section 3.11 (Socioeconomic Resources) correctly concluded there would be no indirect impacts to commercial and recreational fishing.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	Planning Board, "Coexistence of the Fishery & Petroleum Industries," www.elements.nb.ca/theme/fuels/percy/hayne.htm (accessed July 10,2012) (airguns off Cape Breton); R.D. McCauley, J. Fewtrell, A.J. Duncan, C. Jenner, M.-N. Jenner, J.D. Penrose, R.I.T. Prince, A. Adhitya, 1. Murdoch, and K. McCabe, Marine Seismic Surveys: Analysis and Propagation of Air-Gun Signals, and Effects of Air-Gun Exposure on Humpback Whales, Sea Turtles, Fishes, and Squid 185 (2000) (airguns in general). 17 A. Engas, S. L¢kkeborg, E. Ona, and A.V. Soldal, Effects of Seismic Shooting on Local Abundance and Catch Rates of Cod (Gadus morhua) and Haddock (Melanogrammus aeglefinus), 53 Canadian Journal of Fisheries and Aquatic Sciences 2238-49 (1996); J .R. Skalski, W.H. Pearson, and C.I. Malme, Effects of Sound from a Geophysical Survey Device on Catch-Per-Unit-Effort in a Hook and- Line Fishery for Rockfish (Sebastes spp.l, 49 Canadian Journal of Fisheries and Aquatic Sciences 1357-65 (1992). See also S. L¢kkeborg and A.V. Soldal, The Influence of Seismic Exploration with Airguns on Cod (Gadus morhual Behaviour and Catch Rates, 196 ICES Marine Science Symposium 6267 (1993). 18 Id. 19 See J.H.S. Blaxter and R.S. Batty, The Development of Startle Responses in Herring Larvae, 65 Journal of the Marine Biological Association of the U.K. 737-50 (1985); F.R. Knudsen, P.S. Enger, and O. Sand, Awareness Reactions and Avoidance Responses to Sound in Juvenile Atlantic Salmon. 20 See comments compiled by the Navy and posted on the Undersea Warfare Training Range EIS site, Available at http://www.projects.earthtech.com/USWTR (e.g., comments of S. Draughon, S. Fromer, L. and F. Gromadzki, D. Pendergrast, and North Carolina Watermen United).	
NRDC - 30	Permanent Injury and Mortality The Navy's conclusion that underwater noise will result in only "minimal harm" to fish ignores the scientific literature. A number of studies, including one on non-impulsive noise, show that intense sound can kill eggs, larvae, and fry outright or retard their growth in ways that may hinder their survival later.[21] Significant mortality for fish eggs has been shown to occur at distances of 5 meters from an airgun source; mortality rates approaching 50 percent affected yolk sac larvae at distances of 2 to 3 meters.[22] With respect to mid-frequency sonar, the Navy itself has noted that "some sonar levels have been shown [in Norwegian studies] to be powerful enough to cause injury to particular size classes of juvenile herring from the water's surface to the seafloor."[23] Also, larvae in at least some species are known to use sound in selecting and orienting toward settlement sites.[24] Acoustic disruption at that stage of development could have significant consequences.[25] Although the Navy acknowledges studies showing that eggs and larvae are more susceptible to sound, it tries to distinguish them by stating that they "were laboratory studies, however, and have not been verified in the field." DEIS at 3.9-	The approach to analysis (Section 3.0.5.4, Resource-Specific Impacts Analysis for Individual Stressors) states the analysis begins with individual organisms and their habitats, and then addresses populations, species, communities, and representative ecosystem characteristics, as appropriate. Impacts on a resource, not listed as a federally protected species, are not based on impacts on individuals, but rather to the entire population. Section 3.9.3.1.2 (Impacts from Sonar and Other Non-Impulsive Acoustic Sources) and Section 3.9.3.1.3 (Impacts from Explosives and Other Impulsive Acoustic Sources) address potential impacts from all acoustic sources on fish, including non-impulsive noise and swimmer defense airguns. The conclusions reached in the EIS/OEIS are based on the best available science and are fully supported by the science and the analysis.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	32. However, federal law does not allow the Navy to ignore the valid scientific studies that have already been conducted simply because they are contrary to its interest. As the Navy is aware after recently completing consultation with both NMFS (for salmon) and the U.S. Fish and Wildlife Service (for bull trout) over its Explosive Ordinance Disposal ("EOD") training exercises in Puget Sound, underwater explosions are responsible for high direct mortality to fish species present in the area. Indeed, the underwater detonation of just five pounds of plastic explosives has been observed to kill over 5,000 fish with swim bladders, with more accurate estimates ranging as high as 20,000 fish. There are a variety of live-fire training exercises, some of which involve underwater explosions of torpedoes and other ordnance that will take place in the HSTT Study Area. Given the variety of fish and fisheries inhabiting these waters, the Navy's failure to analyze these effects in significant detail is stunning. 21 See,e.g., C. Booman, J. Dalen, H. Leivestad, A. Levsen, T. van der Meeren, and K. Toklum, Effecter av luftkanonskyting pa egg. larver og yngel (Effects from Airgun Shooting on Eggs, Larvae, and Fry), 3 Fisken og Havet 1-83 (1996) (Norwegian with English summary); J. Dalen and G.M. Knutsen, Scaring Effects on Fish and Harmful Effects on Eggs, Larvae and Fry by Offshore Seismic Explorations, in H.M. Merklinger. Progress in Underwater Acoustics 93-102 (1987); A. Banner and M. Hyatt, Effects of Noise on Eggs and Larvae of Two Estuarine Fishes, I Transactions of the American Fisheries Society 134-36 (1973); L.P. Kostyuchenko, Effect of Elastic Waves Generated in Marine Seismic Prospecting on Fish Eggs on the Black Sea, 9 Hydrobiology Journal 45-48 (1973). 22 Booman et al., Effecter av luftkanonskyting pa egg. larver og yngel at 1-83. 23 Navy, Draft Environmental Impact Statement! Overseas Environmental Impact Statement for the Southern California Range Complex 3.7-66 to 3.7-67 (2008). In the HSTT Study Area, the Navy would operate sonar at higher levels than those used in the Norwegian studies. 24 S.D. Simpson, M. Meekan, J. Montgomery, R. McCauley. R., and A. Jeffs, Homeward Sound, 308 Science 221 (2005). 1'; Popper, Effects of Anthropogenic Sounds at 27.	
NRDC - 31	Hearing Loss One series of recent studies showed that passing airguns can severely damage the hair cells of fish (the organs at the root of audition) either by literally ripping them from their base in the ear or by causing them to "explode."[26] Fish, unlike mammals, are thought to regenerate hair cells, but the pink snapper in these studies did not appear to recover within approximately two months after exposure, leading researchers to conclude that the damage was permanent.[27] It is not clear which elements of the sound wave contributed to the injury, or whether repetitive exposures at low amplitudes or a few exposures at higher pressures, or both, were responsible.[28] As with marine mammals,	The Navy has provided the best available science in reviewing impacts to fish from mid-frequency sonar. Section 3.9.3.1 (Acoustic Stressors) and discussion therein explains various studies currently available into the impact of sonar on varying fish species, including a study published by Doksaeter, et al (2009) in which the authors concluded that mid-frequency sonars could be used without substantially affecting the fish. While the effects of sound on all species of fish have not been studied, leaving much unknown, there are reasonable extrapolations that can

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	sound has also been shown to induce temporary hearing loss in fish. Even at fairly moderate levels, noise from outboard motor engines is capable of temporarily deafening some species of fish, and other sounds have been shown to affect the short term hearing of a number of other species, including sunfish and tilapia.[29] For any fish that is dependent on sound for predator avoidance and other key functions, even a temporary loss of hearing (let alone the virtually permanent damage seen in snapper) will substantially diminish its chance of survIval.[30] 26 R. McCauley. J. Fewtrell, and A.N. Popper. High Intensity Anthropogenic Sound Damages Fish Ears, 113 Journal of the Acoustical Society of America 640 (2003). 27 Id. at 641 (some fish in the experimental group sacrificed and examined 58 days after exposure). 28 Id. 29 A.R. Scholik and H.Y. Yan, Effects of Boat Engine Noise all the Auditory Sensitivity of tile Fathead Minnow. Pimephales promelas, 63 Environmental Biology of Fishes 203-09 (2002); AR. Scholik and H. Y. Yan, The Effects of Noise on the Auditory Sensitivity of the Bluegill Sunfish. Lepomis macrochirus, 133 Comparative Biochemistry and Physiology Part A at 43-52 (2002); M.E. Smith, A.S. Kane. & A.N. Popper, Noise-Induced Stress Response and Hearing Loss in Goldfish (Carassius auratusl. 207 Journal of Experimental Biology 427-35 (2003); Popper, Effects of Anthropogenic Sounds at 28. 30 See Popper, Effects of Anthropogenic Sounds at 29; McCauley et at., High Intensity Anthropogenic Sound Damages Fish Ears, at 641.	be made based on the general anatomy of fish and from the representative species that have been studied. Based on those studies and as detailed in Section 3.9 (Fish), it is unlikely that sonar will adversely affect most fish given most fish cannot hear in the frequency range of the mid- and high-frequency sonar Navy is proposing to use. In addition, Navy has been conducting these same training activities for many decades in Southern California and Hawaii and both of which support healthy and diverse fisheries.
NRDC - 32	Breeding Behavior NMFS has observed that the use of mid-frequency sonar could affect the breeding behavior of certain species, causing .them, for example, to cease their spawning choruses, much as certain echolocation signals do. The repetitive use of sonar and other active acoustics could thus have significant adverse behavioral effects on some species of fish and those who depend on them.	The EIS/OEIS included findings by Popper et al (2007) who exposed rainbow trout, a fish sensitive to low frequencies, to high-intensity low-frequency sonar (215 dB re 1 μPa^2 170-320 Hz) with receive level for two experimental groups estimated at 193 dB for 324 or 648 seconds. Fish exhibited a slight behavioral reaction, and one group exhibited a 20-dB auditory threshold shift at one frequency. No direct mortality, morphological changes, or physical trauma was noted as a result of these exposures. These results of low-frequency sonar effects on low-frequency sensitive rainbow trout suggests that similar results may be found with mid-frequency active sonar use when applied to mid-frequency sensitive fish. The assessment for the proposed mid-frequency sound sources (at or above the 3.5 kHz center frequency) suggests that with few exceptions, fish cannot hear sounds above about 3 kHz (Popper 2003, Hastings and Popper 2005). Thus, it is expected that most fish species would not be able to hear the mid-frequency sonar proposed for use. If responses to mid-frequency sonar use do occur, behavioral responses would be brief, reversible, and not biologically significant. Sustained

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		auditory damage is not expected. Sensitive life stages (juvenile fish, larvae and eggs) very close to the sonar source may experience injury or mortality, but below the level of loss of larval and juvenile fish from natural causes. The use of Navy mid-frequency sonar would not compromise the productivity of fish or adversely affect their habitat.
NRDC - 33	In sum, the Navy arbitrarily dismisses the potential for adverse impacts on fish. The Navy also capriciously dismisses the notion that fisheries in the area would suffer economic loss, even though - judging by the comments from North Carolina fishermen in 2005 - its training activities appear to have disrupted fishing in the past. Just like the training proposed in North Carolina, the available evidence here underscores the need for a more serious and informed analysis than the Navy currently provides. To comply with the requirements of NEPA, the Navy should rigorously analyze the potential for behavioral, auditory, and physiological impacts on fish, including the potential for population-level effects, using models of fish distribution and population structure and conservatively estimating areas of impact from the available literature. 40 C.F.R. §1502.22. The Navy must also meaningfully assess the economic consequences of reduced catch rates on commercial and recreational fisheries (as well as on marine mammal foraging) in the HSTT Study Area. It should also consider avoiding essential fish habitat, spawning grounds and other areas of important habitat for fish species, especially hearing specialists. Notably, as with marine mammals, the Navy does not consider exclusion of important fish habitat or fisheries in the HSTT Study Area.	The Navy has conducted a thorough and complete analysis considering fish species and habitat. The Navy has found through the analysis that the proposed actions would not impact fish populations or their habitat. Certain types of training activities would not take place in certain habitats, for example, sinking exercises (SINKEXs) can only occur in waters that meet depth and distance from shore requirements. Therefore, a SINKEX could not occur on a seamount that is less than 6,000 feet below sea level.
NRDC - 34	The Navy's Proposed Mitigation Measures Fail to Protect Marine Wildlife To comply with NEPA, an agency must discuss measures designed to mitigate its project's impact on the environment. See 40 C.F.R. § 1502.14(f). There is a large and growing set of options for the mitigation of noise impacts to marine mammals and other marine life, some of which have been imposed by foreign navies[32]--and by the Navy itself, in other contexts-to limit harm from high-intensity sonar exercises. Yet here the Navy does little more than set forth an abbreviated set of measures, dismissing effective measures out of hand. All of the mitigation that the Navy has proposed for sonar impacts boils down to the following: a very small safety zone around the sonar source, maintained primarily with visual monitoring by personnel with other responsibilities, with aid from shipboard passive monitoring when personnel are already using such technology. Under the proposed scheme, operators would power-down the system if a marine mammal is detected within 1,000 yards and shut-down the system if a marine mammal is detected within 200 yards. DEIS at 5-24. 32 See S.J. Dolman, C.R. Weir, and M. Jasny, Comparative Review of Marine Mammal Guidance Implemented during Naval Exercises, _ Marine Pollution Bulletin _ (Dec. 12,2008).	Each nation has its own training and testing needs based on that nation's forces, capabilities and missions. For the U.S. Navy, the ability to conduct anti-submarine warfare around varying underwater topography is critically necessary in order to fight the growing submarine threat. The Navy has comprehensively evaluated mitigation measures used by other navies to determine the benefits of implementing similar measures. Based on its assessment the Navy found that most other navies do not possess an integrated strike group or have other integrated training requirements like the United States. As integrated strike groups, U.S. Navy requirements frequently include operating within defined distances to suitable landing fields for aircraft safety, thereby geographically constraining the entire strike group. In coordination with NMFS, Navy's proposed mitigation measures were carefully customized for effectiveness in reducing potential impacts on an affected resource and to ensure, from a military perspective, that the mitigations are practicable and executable, and that safety and operational readiness can be maintained.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		As described in more detail to specific comments that follow, several measures were eliminated because they were determined to be unfeasible, present a safety risk, provide no known or scientifically-based protective benefits, or have an unacceptable impact on training fidelity. Through careful exploration of all mitigation measures to determine which were the most effective, the Navy has chosen the measures to mitigate potential impacts to marine mammals while still being able to meet its operational needs to train and test for real world conditions. Specific mitigation measures are outlined in the following sections: Section 5.3.1 (Lookout Procedural Measures), Section 5.3.2 (Mitigation Zone Procedural Measures), and Section 5.3.3 (Mitigation Areas). Specifically, Section 5.3.3.1 (Marine Mammal Habitats) addresses important habitat areas. The decrease in mitigation zone size will allow for a more focused survey effort over a smaller area, and will consequently increase the likelihood of avoidance of injury and larger threshold shifts that would result in recovery (i.e., TTS) to marine mammals. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
NRDC - 35	This mitigation scheme disregards the best available science on the significant limits of visual monitoring. Visual detection rates for marine mammals generally approach only 5 percent. Moreover, the species perhaps most vulnerable to sonar-related injuries, beaked whales, are among the most difficult to detect because of their small size and diving behavior. It has been estimated that in anything stronger than a light breeze, only one in fifty beaked whales surfacing in the direct track line of a ship would be sighted; as the distance approaches 1 kilometer, that number drops to zero.[33] Many other whales are also hard to detect, especially depending on seasonality, geography, and behaviors. For example, the visual and acoustic detection rates of blue whales, which are susceptible to ship strikes in Southern California, differ seasonally and geographically, suggesting that a single detection mode (e.g., visual) may be insufficient to detect blue whales in all seasons and regions.[34] The Navy's reliance on visual observation as the	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	mainstay of its mitigation plan is therefore profoundly misplaced. 33 J. Barlow and R. Gisiner, Mitigating. Monitoring, and Assessing the Effects of Anthropogenic Noise on Beaked Whales, 7 Journal of Cetacean Research and Management 239-249 (2006). 34 E.M. Oleson, J. Calambokidis, J. Barlow and J.A. Hildebrand, Blue Whale Visual and Acoustic Encounter Rates in the Southern California Bight, 23(3) Marine Mammal Science 574-597 (2007)	mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
NRDC - 36	The Navy's ineffective mitigation measures are all the more remarkable given its adoption of more protective measures during previous training. For example, the Atlantic Fleet has repeatedly sited exercises beyond the continental shelf and Gulf Stream, relocated exercises out of important habitat and to avoid certain species, and used a technique called "simulated geography" to avoid canyons and near-shore areas on at least three of its major ranges. It has also restricted sonar use at night when marine mammals are harder to detect, as well as minimized the use of sonar from multiple sources at the same time.[35] In this light, the Navy's claims that it cannot implement more protective mitigation measures ring false. DEIS at 5-52 to 57. Although the Navy goes to some pain to describe "mitigation measures considered but eliminated"--primarily because of "unacceptable impacts on the proposed activity"—its previous adoption of the same measures belies its argument. Clearly the Navy has done more to mitigate the harmful effects of sonar in previous exercises than what it proposes for the HSTT activities. It can, and must, do more to mitigate the harm on marine wildlife. 35 Final Comprehensive Overseas Environmental Assessment for Major Atlantic Fleet Training Exercises February 2006, Prepared for United States Fleet Forces Command in accordance with Chief of Naval Operations Instruction 5090.1B pursuant to Executive Order 12114; See also Atlantic Fleet Exercises Using Mid-Frequency Sonar Mitigation Chart.	The Navy acknowledges the limitations of visual shipboard monitoring and uses aerial monitoring and passive acoustic monitoring for multi-faceted monitoring where practical. The EIS/OEIS, Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), presents the U.S. Navy's mitigation measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training and testing events. In general, there are usually more ships and more observers present on Navy ships, and additional aerial assets engaged in exercise events than used during trackline detection during a survey, therefore increasing the potential to detect marine mammals during a Navy activity. Section3.4.3.1.8.1Model Assumptions and Limitations) in the EIS/OEIS provides a more robust discussion on marine mammal sightability and the inclusion of implementing mitigation measures to reduce the effects of sound exposures on marine mammals. Section 3.4.3.2 (Analysis of Effects on Marine Mammals) has been revised to account for the Navy's mitigation measures and marine mammal behavioral responses to more accurately reflect the predicted potential effects on marine mammals. The measures that Natural Resources Defense Council refers to have not been in place since January 2009, and are not included in the current permits. Section 5.3.4 (Mitigation Measures Considered but Eliminated) includes a complete list of mitigation measures that the Navy has considered but eliminated because the measures are ineffective at reducing environmental impacts, currently have an unacceptable operational impact, or are expected to have an unacceptable operational impact in the future. As described in Section 5.3.4 (Mitigation Measures Considered but Eliminated), it is critical that the Navy be able to conduct anti-submarine warfare training in a variety of environmental and bathymetric conditions, including in the vicinity of canyons and during periods of low visibility. The Navy continuously collects information on the effectiveness of mitigation measures and their impact on military readiness. This accumulation of information helped shaped the Navy's operational assessments throughout Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft and Final EIS/OEIS. As part of the mitigation evaluation process, the Navy did not recommend continuing to

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		implement mitigation measures that were causing unacceptable operational impacts, including interfering with the Navy's ability to meet all or part of its military readiness requirements.
NRDC - 37	Protection Zones As discussed above, there is scientific consensus that geographic mitigation represents the most effective means currently available to reduce the impacts of mid-frequency sonar on marine mammals.[36] It was with that understanding that NOAA launched a multi-year effort to improve the tools available to agencies, including the Navy, for evaluating and mitigating the impacts of anthropogenic noise on marine mammals. One of NOAA's Working Groups, CetMap, is identifying marine mammal "hot spots" in the HSTT Study Area - biologically important areas for marine mammals as evidenced by increases in density and distribution or modeled based on important habitat features. CetMap's identification of these areas should form a basis for creating protection zones where training activities could be barred or limited.	The Navy's overall approach to assessing potential mitigation measures was based on two principles: (1) mitigations will be effective at reducing potential impacts on the resource; and (2) from an operational perspective, the mitigations are practicable and executable while not compromising safety and readiness. Through extensive discussion, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective. For example, the safety zones proposed will reduce the likelihood of physiological harm, the number of marine mammals exposed, and the intensity of those exposures. The Navy has proposed several Mitigation Areas (such as the Humpback Whale Cautionary Area), and the mitigation measures identified throughout Chapter 5 will apply to all marine mammals year round, and will be applied regardless of the location of the activity. However, any future determination of "hot spots" or biologically important areas will require an intense effort in gathering expert opinion. In that regard, Navy has, and will continue to support the Cetacean and Sound Mapping (CetMap) project, including representation on the CetMap Density and Distribution Mapping Working Group. Navy is an active sponsor and participant in CetMap, and the CetMap process is based on the same process Navy used to estimate population density in the HSTT EIS/OEIS and LOA Application. In 2012, the CetMap panel of experts determined that no biologically important areas (the panel determined that "hot spots" is not an appropriate term) could be identified based on data availability and information at hand. Furthermore, no follow-on products have identified areas of recommended avoidance. It is important to note that the areas appearing on the CetMap website are a preliminary draft that needs considerable additional input from the larger biological community before being used to identify biologically important areas in the ocean.
NRDC - 38	The following biologically important areas are but a sample of the kind of areas that should be analyzed by the Navy for the development of protection zones as informed by the results of CetMap: 1) Important habitat for Blainville's beaked whale west of the Big Island.- Satellite tagging data, photo-identification data and survey data dating from 1989 to 2009 indicate the existence of a small, island-associated population of Blainville's beaked whales that	Navy has, and will continue to support the Cetacean and Sound Mapping (CetMap) project, including representation on the CetMap Density and Distribution Mapping Working Group. Navy is an active sponsor and participant in CetMap, and the CetMap process is based on the same process Navy used to estimate population density in the HSTT EIS/OEIS and LOA Application. In 2012, the CetMap panel of experts determined that no biologically important areas (the panel

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	exhibits strong site fidelity to an area on the leeward (west) side of the island of Hawaii.[37] 2) Important habitat for Cuvier's beaked whale around the Big Island.- Long-term photo-identification data indicate high site fidelity of Cuvier's beaked whales off the island of Hawaii.[38] Satellite tagging data indicate individuals are resident to the island using both the east and west sides of the island.[39] Photographic mark-recapture data indicate the population is small and, thus, may need additional protection.[40] 3) Important habitat for Hawaii insular false killer whales between east Oahu and north Maui and off Hawaii Island--Tagging data indicates that two particularly high use areas exist for the insular population of false killer whales, a species of conservation concern.[41] One of these extends from the east side of Oahu to the north side of Maui, and the other lies off the north end of Hawaii Island. 4) Important habitat for Hawaii island resident population of melon-headed whales. A small, demographically isolated population of melon-headed whales has been identified that is resident to the west side of the island, which may need additional protection.[42] 5) Seasonal calving grounds for the humpback whale.- Humpback whales use breeding habitat in the coastal regions and shallow banks within these areas, as established by aerial survey and other effort.[43] For purposes of mitigation, this area would include the Hawaiian Islands Humpback National Marine Sanctuary and, more generally, all waters less than 200m in depth in the Four Island Region, Penguin Bank, Kauai, and Niihau. 6) Important habitat for vulnerable resident odontocele populations around the main Hawaiian Islands.- Biologically important areas should be identified for a number of discrete, island-associated populations, including melon-headed whales,[44] false killer whales,[45] rough-toothed dolphins,[46] spinner dolphins,[47] bottlenose dolphins,[48] pygmy killer whales,[49] pantropical spotted dolphins,[50] short-finned pilot whales,[51] and dwarf sperm whales.[52] 7) Papahanaumokuakea (Northwest Hawaiian Islands) Marine National Monument.- This biologically important area is a marine protected area established by President George W. Bush for its unique biodiversity, including marine mammal biodiversity. The area was also named in a previous court order on LFA as an example of an area from which sonar training should be excluded. 8) Cross Seamount and other seamounts west of the island of Hawaii.- In general, seamounts are known to enhance secondary productivity and concentrate prey, resulting in areas of higher biological density for marine mammals and other species.[53] More specifically, the area around Cross Seamount represents probable offshore feeding habitat for beaked whales, based on acoustic data showing beaked whale foraging echolocation signals occurring there most nights (75%) over a year-long study period.[54] [n addition, scientists have identified three species (false killer whales, rough-toothed dolphins and striped dolphins) on the slopes of Jaggar Seamount, and sperm whales on Indianapolis Seamount.[55]	determined that "hot spots" is not an appropriate term) could be identified based on data availability and information at hand. Furthermore, no follow-on products have identified areas of recommended avoidance. It is important to note that the areas appearing on the CetMap website are a preliminary draft that needs considerable additional input from the larger biological community before being used to identify biologically important areas in the ocean. For additional information regarding specific comments: 1), 3), 4) 8), 9), 10) and 12): Please refer to Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) for a discussion of habitat avoidance. 2) Mitigation will be implemented within the mitigation zone for all marine mammals regardless of species. Passive acoustic monitoring will be used to inform visual observations because resources are not available for the Navy to locate vocalizing animals through passive acoustics during training and testing activities. Mitigation specific to beaked whales and “significant aggregations” are not necessary because the mitigation will be implemented for all species. 5) Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for discussion of seasonal restrictions. The Navy has proposed several seasonal measures, as discussed in Section 5.3.3 (Mitigation Areas). 6) Please refer to Section 5.3.4.1.6 (Limiting Access to Training and Testing Locations) for a discussion on limiting activities to abyssal waters and offshore habitats. 7) Establishment of the Papahanaumokuakea Marine National Monument included language specifically excluding all military activities from the listed prohibitions as long as the military exercises and activities are “carried out in a manner that avoids, to the extent practicable and consistent with operational requirements, adverse impacts on monument resources and qualities.” The Proclamation’s protection of military activities was confirmed in January 2009 when President George W. Bush stated “…I confirm that the policy of the United States shall be to continue measures established in the Papahanaumokuakea Marine National Monument to protect the training, readiness, and global mobility of U.S. Armed Forces.” Please refer to Section 6.1.2 (Marine Protected Areas) for a discussion on the Marine Protected Areas contained with the Study Area. Please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	9) Tanner and Cortez Bank.- Compiled survey data and features analysis confirm Tanner and Cortez Banks as relatively high density areas for blue, fin, beaked, sperm, humpback whales and Kogia spp. This feature (including both banks out to the 1000m isobath) accounted for 35% of the total sightings of these species throughout the California Bight region, based on our analysis of 13 surveys conducted between 1975 and 2004.[56] Tanner and Cortez Banks and their southern edge extending into Tanner Canyon appear to be highly important feeding grounds for blue and fin whales (Calambokidis pers. comm.) and possibly beaked and sperm whales as well. Humpback whales are not as common as blue and fin whales in the deeper waters of the Bight, but are also observed at least occasionally around Tanner and Cortez Banks. Earlier pinniped surveys observed high numbers of fur seals near Tanner Bank as well. 10) Areas of importance to beaked whales.- Recently, NMFS' Southwest Fisheries Science Center has conducted a combined visual and towed passive acoustic survey of potential beaked whale habitat off Southern California. Those surveys have identified a few areas with apparent high occurrence of beaked whales, representing portions - and particularly the northern edges - of certain ocean basins. These areas include portions of the Santa Cruz Basin (which lies outside SOCAL but within the Pt. Mugu Sea Range), of the San Nicolas Basin (west of the SCORE range), of the Catalina Basin, and of the San Diego Trough. 11) Channel Islands National Marine Sanctuary ("NMS").- The Channel Islands NMS is an area of enormous marine biodiversity and must be considered for additional protections. 12) Additional areas.- As informed by CetMap, additional areas may include shelf waters north of San Nicholas Island and Lorna and La Jolla Canyons. By failing to design and discuss mitigation for these and similar areas, the Navy failed to comply with NEPA. See 40 C.F.R. § 1502. 14(f). The Navy must revise and reissue its DEIS after fully analyzing the information produced by CetMap and identifying reasonable mitigation that the public can review and submit comments on.	Hours) for a discussion on how the Navy uses active sonar at the lowest practicable source level consistent with mission requirements, and Section 5.5.2 (Reporting) for a discussion on the Navy's reporting requirements. 11) Please refer to Section 6.1.2 (Marine Protected Areas) for a discussion on the Marine Protected Areas contained with the Study Area.
NRDC - 39	Mitigation of Navy Debris and Expended Material The DEIS fails to set forth any mitigation measures concerning the massive amount of discarded debris and expended materials associated with its proposed activities in the HSTT Study Area. The Navy claims that ocean currents will rapidly disperse the expended materials and thus no mitigation is required. "In NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' is an understanding that the EIS will discuss the extent to which adverse effects can be avoided." Robertson, 490 U.S. at 352-53. The Navy's "all-or-nothing approach" is not a sufficient discussion of how the adverse impacts of expended material can be avoided. By failing to explore mitigation measures for expended materials, the Navy does not even attempt to avoid,	The Navy conducted a full analysis of the potential impacts of military expended materials on marine resources and has proposed several mitigation measures to help avoid or reduce those impacts. The analysis is contained throughout Chapter 3 (Affected Environment and Environmental Consequences) of the Draft and Final EIS/OEIS (e.g., Section 3.3.3.2.1, Impacts from Military Expended Materials discusses marine habitats). For example, military expended materials related to training exercises under a worst-case scenario under Alternatives 1 and 2 would not impact more than 0.00009 percent of the available soft bottom habitat annually within any of the range complexes. The Navy has standard operation procedures in place to reduce the

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	minimize, rectify, reduce, or compensate for its dumping of debris - all of which are options included in the CEQ regulation's definition of "mitigation." 40 C.F.R. §1508.20.	amount of military expended materials (Section 5.1.4.2, Weapons Firing Range Clearance), including recovering targets and associated parachutes to the maximum extent practical. In addition, the Navy has developed mitigation areas (Section 5.3.3.2, Seafloor Resources) to avoid and reduce potential impacts of military expended materials on seafloor habitats, including coral and hardbottom habitats.
NRDC - 40	Other Mitigation Measures In addition to considering protection zones and mitigation for expended materials, the Navy should adopt the following measures: I) Seasonal avoidance of marine mammal feeding grounds, calving grounds, and migration corridors;	In cooperation with NMFS, the Navy has developed a suite of mitigation measures that are practicable to implement and that allow training and testing activities to meet their readiness requirements. 1)The balance between Procedural Measures and Mitigation Area measures (see Section 5.2.3, Assessment Method) provide a way for the Navy to mitigate potential impacts while maintaining its military readiness objectives. Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for discussion of seasonal restrictions. The Navy has proposed seasonal measures, as discussed in Section 5.3.3 (Mitigation Areas), specifically Section 5.3.3.1.1.1 (Humpback Whale Cautionary Area) where mid-frequency active sonar training will not occur within the Humpback Whale Cautionary Area between 15 December and 15 April.
NRDC - 41	2) Avoidance of, or extra protections in, marine protected areas;	2) The Navy has identified areas and afforded extra protections in certain areas. For example, The Navy has designated a humpback whale cautionary area (described in Section 5.3.2, Mitigation Zone Procedural Measures), which consists of a 5 km (3.1 miles [mi.]) mitigation zone that has been identified as having one of the highest concentrations of humpback whales during the period between 15 December and 15 April. Navy activities within marine protected areas abide by the regulations of the individual marine protected area. Please refer to Section 6.1.2 (Marine Protected Areas) for a discussion on the Marine Protected Areas contained with the Study Area.
NRDC - 42	3) Avoidance of bathymetry likely to be associated with high-value habitat for species of particular concern, including submarine canyons and large seamounts, or bathymetry whose use poses higher risk to marine species;	3) Please refer to Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) for a discussion of habitat avoidance.
NRDC - 43	4) Avoidance of fronts and other major oceanographic features, such as the California Current and other areas with marked differentials in sea surface temperatures, which have the potential to attract offshore concentration of animals, including beaked whales;[57] 57 See, e.g., Carretta et aI., U.S. Pacific Marine Mammal Stock Assessments: 2007 at 142 (reporting that "Baird's beaked whales have been seen primarily along the	4) As presented in Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) the issue of habitat avoidance has been discussed. Also note the same issue was raised and also analyzed in the previous Navy environmental documents for both SOCAL and Hawaii involving training and testing at sea since 2005. As presented in Section 5, there are many reasons why it is not

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	continental slope from late spring to early fall.").	practical or reasonable to avoid broad ocean areas where beaked whales might be located and/or areas where they have co-existed with Navy training and testing activities for decades. There is no direct evidence from Hawaii or Southern California suggesting Navy training and testing over many decades has had or may have any long term consequences to marine mammals. Using beaked whales as an example, based on a series of surveys from 2006 to 2008 and the high number encounter rate, Falcone et al. (2009) proposed that their observations suggested the ocean basin west of San Clemente Island may be an important region for Cuvier's beaked whales. For over three decades, this ocean area west of San Clemente has been the location of the Navy's instrumented training range and is one of the most intensively used training and testing areas in the Pacific, given the proximity to the Naval installations in San Diego. A more detailed discussion and additional information is presented in the last subsection of Section 3.4 titled "Summary of Observations During Previous Navy Activities". It includes details on the Navy's monitoring program (see Navy's monitoring reports available at http://www.navymarinespeciesmonitoring.us/ and also at the NMFS website; www.nmfs.noaa.gov/pr/permits/incidental.htm#applications) in the HSTT Study Area, which includes research, monitoring before, during, and after training and testing events since 2006, and the reports that have been submitted to and reviewed by NMFS. Based on this research, the Navy's assessment is that it is unlikely there will be impacts to populations of marine mammals (such as whales, dolphins and porpoise, seals and sea lions) having any long term consequences as a result of the proposed continuation of training and testing in the ocean areas historically used by the Navy. This assessment of likelihood is based on four indicators from areas in the Pacific where Navy training and testing has been ongoing for decades: (1) evidence suggesting or documenting increases in the numbers of marine mammals present, (2) examples of documented presence and site fidelity of species and long-term residence by individual animals of some species (including beaked whales), (3) use of training and testing areas for breeding and nursing activities, and (4) six years of comprehensive monitoring data indicating a lack of any observable effects to marine mammal populations as a result of Navy training and testing activities.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 44	5) Avoidance of areas with higher modeled takes or with high-value habitat for particular species;	5) Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for a discussion on marine species habitats with respect to modeled takes.
NRDC - 45	6) Concentration of exercises to the maximum extent practicable in abyssal waters and in surveyed offshore habitat of low value to species;	6) Please refer to Section 5.3.4.1.6 (Limiting Access to Training and Testing Locations) for a discussion on limiting activities to abyssal waters and offshore habitats.
NRDC - 46	7) Use of sonar and other active acoustic systems at the lowest practicable source level, with clear standards and reporting requirements for different testing and training scenarios;	7) The Navy concurs; please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) for a discussion on how the Navy uses active sonar at the lowest practicable source level consistent with mission requirements. See Section 5.5.2 (Reporting) for a discussion on the Navy's reporting requirements, which will be coordinated through NMFS through the permitting process.
NRDC - 47	8) Expansion of the marine species "safety zone" to a 4km shutdown, reflecting international best practice, or 2 km, reflecting the standard prescribed by the California Coastal Commission;[58] 46 California Coastal Commission, Adopted Staff Recommendation on Consistency Determination CD-08606 (2007); Approved Letter from M. Delaplaine, California Coastal Commission, to Rear Adm. Len Hearing, Navy (Jan. 11, 2007).	8) Please refer to Section 5.3.4.1.14 (Increasing the Size of Observed Mitigation Zones) for a discussion on mitigation zone expansion. The Navy recommended mitigation zones represent the maximum area the Navy can effectively observe based on the platform of observation, number of personnel that will be involved, and the number and type of assets and resources available. As mitigation zone sizes increase, the potential for reducing impacts decreases. For instance, if a mitigation zone increases from 1,000 to 4,000 yd. (914 to 3,658 m), the area that must be observed increases sixteen-fold. The Navy recommended mitigation measures balance the need to reduce potential impacts with the ability to provide effective observations throughout a given mitigation zone. There is no internationally recognized best practice with regard to mitigation zone distance. The mitigation zones discussed throughout the Draft EIS/OEIS and Final EIS/OEIS were developed using the latest best available science, are consistent with regulatory requirements and criteria, and are tailored to the Proposed Action; therefore, adopting other mitigation zones would neither be a practical nor effective mitigation scheme for the Proposed Action.
NRDC - 48	9) Suspension or relocation of exercises when beaked whales or significant aggregations of other species are detected by any means within the orbit circle of an aerial monitor or near the vicinity of an exercise;	9) Mitigation will be implemented within the mitigation zone for all marine mammals regardless of species. Passive acoustic monitoring will be used to inform visual observations. The technology is not available for the Navy to locate vocalizing animals through passive acoustics during training and testing activities. Mitigation specific to beaked whales and "significant aggregations" are not necessary because the mitigation will be implemented for all species, and any number of animals observed.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 49	10) Use of simulated geography (and other work-arounds) to reduce or eliminate chokepoint exercises in near-coastal environments, particularly within canyons and channels, and use of other important habitat;	10) The Navy does make use of simulated geography for training purposes. Please refer to Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities) and Section 5.3.4.1.7 (Avoiding Locations Based on Bathymetry and Environmental Conditions) for a discussion on simulated activities and the importance of training in near-coastal environments with complex geography. The presence of canyons and channels are not necessarily indicative of important habitat.
NRDC - 50	11) Avoidance or reduction of training during months with historically significant surface ducting conditions, and use of power-downs during significant surface ducting conditions at other times;	11) Please refer to Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar During Strong Surface Ducts) for a discussion of surface ducts. Training in surface ducting conditions is a critical component to military readiness because sonar operators need to learn how sonar transmissions are altered due to surface ducting.
NRDC - 51	12) Use of additional power-downs when significant surface ducting conditions coincide with other conditions that elevate risk, such as during exercises involving the use of multiple systems or in beaked whale habitat;	12) Please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) for a discussion of sonar levels and hours and Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar During Strong Surface Ducts) for a discussion of surface ducts. Mitigation measures are implemented equally in all locations where the activity occurs. Refer to Chapter 3.4 (Marine Mammals) and the Navy Marine Species Density Database Technical Report for information on beaked whale habitat within the Study Area. Some species of beaked whales are found throughout the entire Study Area; therefore, implementing additional power-downs throughout the Study Area would cause an unacceptable impact to readiness.
NRDC - 52	13) Planning of ship tracks to avoid embayments and provide escape routes for marine animals;	13) Please refer to Section 5.3.4.1.6 (Limiting Access to Training and Testing Locations) for a discussion of limiting vessel movements. The Navy is not proposing to train or test in areas where marine animals would have no escape. The only location where the Navy has conducted sonar activities was in the Bahamas in 2000, but those conditions are not replicated within the HSTT Study Area.
NRDC - 53	14) Suspension or postponement of chokepoint exercises during surface ducting conditions and scheduling of such exercises during daylight hours;	14) Please refer to Section 5.3.4.1.8 (Avoiding or Reducing Active Sonar at Night and During Periods of Low Visibility) and Section 5.3.4.1.9 (Avoiding or Reducing Active Sonar During Strong Surface Ducts) for a discussion of activities conducted during varying environmental conditions. The Navy proposes to continue chokepoint exercises in Hawaii because of the valuable and necessary training they provide.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 54	15) Use of dedicated aerial monitors during chokepoint exercises, major exercises, and near-coastal exercises;	15) Some events can occur over several hours and is dependent upon multiple variables including, but not limited to, weather, background traffic, training requirements, delays for mitigation, etc., that may make it impractical and unsafe to have dedicated aerial monitors. Additionally some events typically occur near commercial and military airspace that would pose a serious risk to the survey and non-survey aircraft. If an aircraft is participating in the event they are used for survey as described in the mitigation proposed by Navy. While these activities can occur over several hours they often occur overan extended distance from land making a dedicated aerial survey platfrom unsafe and impractical. Navy already has mitigation in place designed to minimize potential effects from these activities. Refer to Section 5.3.4.1.12 (Increasing Visual and Passive Acoustic Observations) for additional discussion on visual observations or specific mitigations designed for activities involving the use of aerial monitors in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring). Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) for a discussion on visual observations.
NRDC - 55	16) Use of dedicated passive acoustic monitoring to detect vocalizing species, through established and portable range instrumentation and the use of hydrophone arrays off instrumented ranges;	16) Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) for a discussion on passive acoustic observations.
NRDC - 56	17) Modification of sonobuoys for passive acoustic detection of vocalizing species;	17) Mid-frequency active sonar training is required year-round in all environments, including night and low-visibility conditions. Training occurs over many hours or days, which requires large teams of personnel working together in shifts around the clock to work through a scenario. Training at night is vital because environmental differences between day and night affect the detection capabilities of sonar. Temperature layers that, which affect sound propagation, move up and down in the water column and ambient noise levels can vary significantly between night and day, which affects sound propagation and could affect how sonar systems are operated from day to night and vice versa. Consequently, personnel must train during all hours of the day to ensure they identify and respond to changing environmental conditions, and not doing so would unacceptably decrease training effectiveness and reduce the crews' abilities. Therefore, the Navy cannot operate only in daylight hours or wait for the weather to clear before training .Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) for a discussion on passive

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		acoustic observations. As described throughout Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), Passive acoustic monitoring will be conducted with Navy assets, such as sonobuoys, when practicable. Passive sonobuoys are designed to detect submarine-produced sounds. Modifying sonobuoys and receiver equipment to focus on marine mammal vocalizations would detract from their ability to perform their primary mission.
NRDC - 57	18) Suspension or reduction of exercises outside daylight hours and during periods of low visibility;	18) Please refer to Section 5.3.4.1.8 (Avoiding or Reducing Active Sonar at Night and During Periods of Low Visibility) for a discussion of activities conducted during varying environmental conditions.
NRDC - 58	19) Use of aerial surveys and ship-based surveys before, during, and after major exercises;	19) Some events can occur over several hours and is dependent upon multiple variables including, but not limited to, weather, background traffic, training requirements, delays for mitigation, etc., that may make it impractical and unsafe to have dedicated aerial monitors. Additionally some events typically occur near commercial and military airspace that would pose a serious risk to the survey and non-survey aircraft. If an aircraft is participating in the event they are used for survey as described in the mitigation proposed by Navy. While these activities can occur over several hours they often occur overan extended distance from land making a dedicated aerial survey platfrom unsafe and impractical. Navy already has mitigation in place designed to minimize potential effects from these activities. Refer to Section 5.3.4.1.12 (Increasing Visual and Passive Acoustic Observations) for additional discussion on visual observations or specific mitigations designed for activities involving the use of aerial monitors in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring). Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) for a discussion on visual observations. Please refer to Section 5.3.4.1.13 (Increasing Visual and Passive Acoustic Observations) for a discussion on visual observations.
NRDC - 59	20) Use of all available range assets for marine mammal monitoring;	20) The current Navy monitoring program is composed of a collection of range-specific monitoring plans, each of which was developed individually as part of MMPA and ESA compliance processes as environmental documentation was completed. These individual plans establish specific monitoring requirements for each range complex or testing range and are collectively intended to address the Integrated Comprehensive Monitoring Plan top-level goals. Please see Section 5.5 (Monitoring and Reporting) for additional information on the Navy's

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		marine mammal monitoring.
NRDC - 60	21) Use of third-party monitors for marine mammal detection;	21) Please refer to Section 5.3.4.1.15 (Conducing Visual Observations Using Third-Party Observers) for a discussion on third-party observers.
NRDC - 61	22) Application of mitigation prescribed by state regulators, by the courts, by other navies or research centers, or by the U.S. Navy in the past or in other contexts;	22) Please refer to Section 5.3.4.1.16 (Adopting Mitigation Measures of Foreign Navies) for a discussion on foreign navies. Mitigation is developed in cooperation with NMFS and will be further refined through the MMPA and ESA consultation processes. Evaluation of past and present U.S. Navy mitigation measures is included throughout Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring); most measures originated through past environmental analyses and associated consultations with regulators. Mitigation measures are based on the best available science with regard to protection of marine mammals and the practicality of their implementation.
NRDC - 62	23) Avoidance of fish spawning grounds and of important habitat for fish species potentially vulnerable to significant behavioral change, such as widescale displacement within the water column or changes in breeding behavior;	23) This EIS/OEIS describes potential impacts to fish species and concludes that there are no impacts that would justify area avoidance for the Navy's proposed activities. Because of the wide variety of marine species in and around the HSTT Study Area, such avoidance areas as suggested in the comment would serve to exclude proposed activities from the entire Study Area. Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for a discussion of habitat avoidance. Also see Section 3.9 (Fish) regarding the effects determinations on fish in the FEIS/OEIS.
NRDC - 63	24) Evaluating before each major exercise whether reductions in sonar use are possible, given the readiness status of the strike groups involved;	24) Please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) for a discussion on how the Navy uses active sonar at the lowest practicable source level and number of hours consistent with mission requirements. Strike groups are constantly evaluated and exercises are modified to ensure each strike group receives the training necessary to achieve required readiness levels.
NRDC - 64	25) Dedicated research and development of technology to reduce impacts of active acoustic sources on marine mammals;	25) The Navy provides a significant amount of funding and support to marine research. Navy scientists work cooperatively with other government researchers and scientists, universities, industry, and non-governmental conservation organizations in collecting, evaluating, and modeling information on marine resources. Details on the Navy's involvement with future research will be worked out through the Navy and NMFS adaptive management process, which regularly considers

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		and evaluates the development and use of new science and technologies for Navy applications.
NRDC - 65	26) Establishment of a plan and a timetable for maximizing synthetic training in order to reduce the use of active sonar training;	26) Please refer to Section 5.3.4.1.2 (Replacing Training and Testing with Simulated Activities) for a discussion on simulated activities.
NRDC - 66	27) Prescription of specific mitigation requirements for individual classes (or sub-classes) of testing and training activities, in order to maximize mitigation given varying sets of operational needs; and	27) The Navy has developed mitigation by activity type to reduce potential impacts from the Proposed Action while not causing an unacceptable impact to readiness. Please refer to Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) for a discussion of these measures.
NRDC - 67	28) Timely, regular reporting to NOAA, state coastal management authorities, and the public to describe and verify use of mitigation measures during testing and training activities	28) Navy reporting requirements, including exercise and monitoring reporting, are described in Section 5.5.2 (Reporting). Reports are provided to NMFS as the regulator responsible for protecting marine mammals, and unclassified reports are publicly available on the Navy and NMFS websites. Please refer to Section 5.3.4.1.17 (Increasing Reporting Requirements) for additional discussion.
NRDC - 68	While the Navy considers, and summarily dismisses, many of these measures in its OEIS, it fails to do so in a manner permitted by NEPA and we note that similar or additional measures may be required under the Marine Mammal Protection Act, Endangered Species Act, and other statutes.	Comment noted. The Navy intends to work cooperatively with NMFS, the Navy's cooperating agency and the regulator under the MMPA, to finalize mitigation measures through the permitting and consultation processes for MMPA, ESA, and other laws as required.
NRDC - 69	The Navy Fails to Properly Analyze Cumulative Impacts In order to satisfy NEPA, an EIS must include a "full and fair discussion of significant environmental impacts." 40 C.F.R. § 1502.1. It is not enough, for purposes of this discussion, to consider the proposed action in isolation, divorced from other public and private activities that impinge on the same resource; rather, it is incumbent on the Navy to assess cumulative impacts as well, including the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future significant actions." Id. § 1508.7. A meaningful cumulative impact analysis must identify (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions-past, present, proposed, and reasonably foreseeable-that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate. Grand Canyon Trust v. FAA, 290 F.3d 339, 345 (D.C. Cir. 2002) (quotation and citation omitted). The Navy "cannot treat the identified environmental concern in a vacuum." TOMAC v. Norton, 433 F.3d 852, 863 (D.C. Cir. 2006) (quoting Grand Canyon Trust, 290 F.3d at 345). The Navy's cumulative impact analysis fails to meet these basic requirements.	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (Chapter 4, Cumulative Impacts). As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3 (Affected Environment and Environmental Consequences). The EIS/OEIS considered its activities alongside those of other activities in the region whose impacts are "truly meaningful" to the analysis. Furthermore, the entire EIS/OEIS provides the cumulative impacts analysis, not just Chapter 4. Chapter 3, in particular, provides the current effects of past and present impacts and environmental conditions that represent the baseline of the environment as it is; Chapter 3 also discusses the consequences or potential future impacts from Navy activities. Chapter 4, then, discusses the other reasonably foreseeable activities to the extent they are known and the incremental impact of the Navy's proposal when added to past, present, and future impacts.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	Nowhere in its cumulative impact analysis does the Navy consider-let alone reach the conclusion-that the sum of the various environmental impacts that are enumerated will be limited. DEIS at 4-1 to 35. The Navy's analysis cannot provide such support because the Navy fails to explain what the sum of these impacts is expected to be. NEPA requires more than just a recital of possible impacts: it requires the Navy to actually analyze the overall impact of the accumulation of individual impacts. Grand Canyon Trust, 290 F.3d at 345. The DEIS fails to make this analysis.	
NRDC - 70	The Navy apparently believes it is enough to find that cumulative impacts will be "significant" and that, defying logic, impacts from its proposed activities will be relatively low when analysis is not warranted.[59] Yet most well-informed laypeople know that human activities have a significant impact on the marine environment, contributing to population declines, extinctions, and challenges to recovery. The Navy's recitation that it is hard out there for struggling species, offers no insight as to how impacts from its proposed activities should be placed in perspective when assessing cumulative threats to marine wildlife. To the extent that the Navy does offer perspective, it is to claim, without any support, that the relative contribution of its activities is low when compared to other threats. Such assertions are patently absurd given the amount of take - over 14 million instances of marine mammal take over 5 years, including almost 3 million instances of temporary hearing loss - projected to result from the Navy's activities. compared to other actions to support its conclusion that further 59) For marine mammals the Navy states: In summary, based on the analysis presented in Section 3.4 (Marine Mammals) the current aggregate impacts of past and present actions and reasonably foreseeable future actions are expected to result in significant impacts on some marine mammal species in the Study Area. Therefore, cumulative impacts on marine mammals would be significant without consideration of the impacts of Alternatives I or 2. Alternatives I and 2 would contribute to and increase cumulative impacts, but the relative contribution would be low compared to other actions. Further analysis of cumulative impacts on marine mammals is not warranted. DEIS at 4-28. The Navy makes an identical statement for other species. E.g., Sea turtles (DEIS at 431).	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (see Chapter 4, Cumulative Impacts). As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3. The EIS/OEIS considered its activities alongside those of other activities in the region whose impacts are "truly meaningful" to the analysis. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
NRDC - 71	The Navy must also consider the full effects of its sonar training. It simply assumes that all behavioral impacts are short-term in nature and cannot affect individuals or populations through repeated activity-even though the anticipated takes of its preferred alternative would affect the same populations year after year. While the DEIS's analysis focuses on impacts over 5 years, naval training and testing will undoubtedly continue in the HSTT Study Area for the foreseeable future. At current rates, which is a conservative estimate given increases in training and testing activities over the last decade, the marine mammal populations of the HSTT Study Area will suffer nearly 100 million takes over the next 35 years.	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (see Chapter 4, Cumulative Impacts). As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3. The EIS/OEIS considered its activities alongside those of other activities in the region whose impacts are "truly meaningful" to the analysis. The scope of the EIS/OEIS only extends to 2019, at which time, further NEPA analysis will be conducted for the permitting process. At that time, the needs of

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		the Navy's training and testing communities will be re-evaluated.
NRDC - 72	Nor does the Navy consider the potential for acute synergistic effects from sonar training. Although the OEIS discusses the potential for ship strike in the training area (OEIS 4-23 to 25 for marine mammals), it does not consider the greater susceptibility to vessel strike of animals that have been temporarily harassed or disoriented by certain noise sources. The absence of analysis is particularly glaring in light of the Haro Strait incident, in which killer whales and other marine mammals were observed fleeing away from the sonar vessel at high speeds.[60] Neither does the Navy consider the synergistic effects of noise with other stressors in producing or magnifying a stress-response.[61] For these reasons alone, the Navy should have concluded that the cumulative and synergistic impacts from sonar training are Significant and focused its efforts to analyze and develop mitigation measures to avoid those impacts.	Based on the page numbers described, this comment seems to have been made on the Navy's 2008 Atlantic Fleet Active Sonar Training EIS/OEIS for Navy training activities in the Atlantic Ocean, and not the HSTT DEIS/OEIS. Although the Navy acknowledges that acute synergistic effects are not well-studied and can only be accounted for qualitatively, a section for each resource exists that discusses this particular issue. For marine mammals, it is Section 3.4.4 (Summary of Impacts [Combined Impact of All Stressors] on Marine Mammals).
NRDC - 73	The Navy acknowledges that the HSTT Study Area is crowded with human and military activities, many of which introduce noise, chemical pollution, debris, and vessel traffic into the habitat of protected species. OEIS at 4-4 to 16. Yet it inexplicably fails to conclude what the cumulative effects will be for the environment other than saying the impacts will be "significant." NEPA's cumulative impacts analysis must require more than stating the obvious. Given the scope of the proposed action, the deficiencies of the Navy's cumulative impacts assessment represents a critical failure of the DEIS. At a minimum, the Navy must evaluate the potential for cumulative impacts on populations that will occur in and near the HSTT Study Area, clearly define the extent of expected cumulative impacts, and assess the potential for synergistic adverse effects (such as from noise in combination with ship-strikes).	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis (see Chapter 4, Cumulative Impacts). As required under NEPA, the level and scope of the analysis are commensurate with the potential impacts of the action as reflected in the resource-specific discussions in Chapter 3. The EIS/OEIS considered its activities alongside those of other activities in the region whose impacts are "truly meaningful" to the analysis.
NRDC - 74	The Navy Fails to Properly Analyze Reasonable Alternatives To comply with NEPA, an EIS must "inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. The regulation itself describes the requirement as "the heart of the environmental impact statement." [d. at § 1502.14. Courts similarly portray the alternatives requirement as the "linchpin" of the EIS. Monroe County Conservation Council v. Volpe, 472 F.2d 693 (2d Cir. 1972). The agency must therefore "[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14(a). The agency must also state how the alternatives considered in the DEIS and decisions based on the DEIS will or will not achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies. See 40 C.F.R. § 1502.2(d). Consideration of alternatives is required by (and must conform to the independent terms of) both sections lO2(2)(C) and lO2(2)(E) of NEPA. Here, the Navy's alternatives	The alternatives carried forward meet the Navy's purpose and need (Section 1.4, Purpose and Need) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	analysis misses the mark. Three alternatives are given in the DEIS: a No Action Alternative (maintaining the current level of activities), Alternative 1 (increasing training and testing activities and force structure changes), and the preferred Alternative 2 (Alternative 1 with range enhancements and more training and testing activities). These alternatives do not provide decision makers with a range of genuine choices. While the purpose of the alternatives analysis is to "consider the likely environmental impacts of the preferred course of action as well as reasonable alternatives," which "facilitates informed decisionmaking by agencies and allows the political process to check those decisions," New Mexico ex reI. Richardson v. BLM, 565 F.3d 683, 703-704 (10th Cir. 2009), the DEIS falls short of this goal. The Navy's alternatives amount to a presentation of only one true course of action: potential training and testing in all areas at all times. A. Failure to Identify Environmental Impact-Based Alternatives The Navy claims it "considers potential environmental impacts" while executing its responsibilities under federal law, including NEPA. DEIS at I-I. But the Navy's alternatives were not selected to "inform decision-makers and the public" of how the Navy could "avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. Instead, as discussed in the DEIS and below, the Navy chose alternatives based on factors unrelated to the proposed action's environmental impacts.	
NRDC - 75	At no point in the OEIS does the Navy discuss how the alternatives pose different environmental choices for the public and decisionmakers. The DEIS fails entirely to comply with NEPA's regulations, requiring the Navy to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. The Navy fails to sharply define the environmental issues applicable to each alternative and include these differences in a comparison of alternatives. There is simply no comparison of the risks and benefits of each alternative site showing what is and is not known and what species and habitats would be most at risk from each alternative	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration).
NRDC - 76	The two alternatives that meet the Navy's purpose and needs present no options for a decisionmaker wishing to reduce harms to the environment or for the public to hold decisionmakers accountable for their choices based on environmental impacts. For example, a decisionmaker wishing to choose the alternative that does less harm to sea turtles has nowhere to turn. Similarly, both of the Navy's alternatives result in the exact same impact to marine mammals from training with sonar - over 2.5 million takes per year. Violating NEPA's regulations, there is no presentation of an alternative that details a way forward that "avoid[s] or minimizes] adverse impacts or enhancers] the quality of	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	the human environment." /d.	Eliminated from Further Consideration).
NRDC - 77	The Navy Improperly Dismissed Alternatives Necessary to Provide a Well Reasoned Choice of Alternatives Several alternatives were recommended to the Navy during the scoping process that addressed this absence of environmental impact-based alternatives. However, the DEIS improperly dismisses all these suggestions. "While NEPA 'does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective,' it does require the development of 'information sufficient to permit a reasoned choice of alternatives as far as environmental aspects are concerned. '" New Mexico ex reI. Richardson v. BLM, 565 F.3d 683, 708-709 (10th Cir. 2009) quoting Colorado Envrl. Coalition v. Dombeck, 185 F.3d 1162, 1174 (lath Cir. 1999).	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration).
NRDC - 78	Dismissing the suggestions, the Navy fails to show how any of the alternatives are "too remote, speculative, or impractical or ineffective." For instance, while proximity to home ports and complexes might prove to be more convenient and even more cost effective, neither expense nor ease equates to the level of being too remote, speculative, or impractical or ineffective. See DEIS § 2.5.1.1 at 2-59 t060. These factors alone cannot dictate an agency's choice of alternatives to evaluate in an EIS.	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration).
NRDC - 79	"The primary purpose of the impact statement is to compel federal agencies to give serious weight to environmental factors in making discretionary choices." 1-291 Why? Ass'n v. Burns, 372 F.Supp. 233,247 (D. Conn. 1974). If an agency is permitted to consider and compare the environmental impacts of its proposed action with only equally convenient alternatives-and permitted to omit from such analysis any alternatives that are less convenient, no matter that they might result in significant environmental benefits-this purpose would be thwarted and the alternatives analysis loses its purpose entirely. An agency must discuss all reasonable alternatives-those that will accomplish the purpose and need of the agency and are practical and feasible-not simply those it finds most expedient. 40 C.F.R. § 1502.14. By improperly disregarding many alternatives, the Navy has failed to discuss all reasonable alternatives.	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration).
NRDC - 80	The Navy Must Identify Alternative Sites and Seasonal Restrictions The Navy's analysis is devoid of geographic alternatives and even minor seasonal restrictions. This omission is inappropriate in light of the strong consensus-at NOAA and in the scientific community-that spatial-temporal avoidance of high-value habitat represents the best available means to reduce the impacts of mid-frequency active sonar	As described throughout Chapter 2 (Description of Proposed Action and Alternatives), geographic and seasonal flexibility is required to support evolving Navy training and testing requirements, which are linked to real world events. As described in Section 5.2.3.1 (Effectiveness Assessment) of the EIS/OEIS, a specific season, time

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	and certain other types of ocean noise on marine life.[62] 62 - Supra, Note 3. Protected areas should ordinarily be identified during the planning stage based on biological and oceanographic factors, rather than merely on the confirmed presence of marine animals in real time; and, indeed, the Naval Facilities Engineering Command, Atlantic undertook just such an analysis in the Navy's previous EIS for Atlantic Fleet Active Sonar Training. The Navy's detailed planning for certain training and testing exercises, particularly major exercises, such as RIMPAC, JTFEXs, COMPTUEXs, and USWEXs, provide an ideal opportunity to develop reasonable alternatives for the timing and siting of such activities based on biological and oceanographic factors.	of day, or geographic area must be important to the resource to determine whether the potential for establishing a mitigation area would be effective in avoiding or reducing a potential impact on a resource. In determining importance, special consideration will be given to those time periods or geographic areas having characteristics such as especially high overall density or percent population use, seasonal bottlenecks for a migration corridor, and identifiable key foraging and reproduction areas. The Navy proposes mitigation measures (a portion of which will include specific mitigation areas) on a case-by-case basis that would apply to all locations where a specified activity occurs. The balance between Procedural Measures and Mitigation Area measures provide a way for the Navy to mitigate potential impacts while maintaining its military readiness objectives. The proposed mitigation measures were developed in coordination with NMFS in order to avoid or reduce a potential impact on a particular resource.
NRDC - 81	Further spatial-temporal alternatives do not require large shifts in location, but rather can be very effective by simply carving out small areas of known biological importance. For instance, the Navy concedes in its mitigation analysis (DEIS at 5-45) the importance of the Humpback Whale National Marine Sanctuary off the coast of the Hawaiian Islands, designating a "cautionary area" that requires higher administrative approval for activities in the area during winter months. Despite this recognition, the Navy fails to identify other areas and develop an alternative based on avoiding a handful of biologically important areas. Instead, all of the alternatives propose yearround, unrestricted use without regard to seasonal variations in marine mammal and fish abundance. This is true despite the well-documented seasonal migrations of numerous endangered species and the identification of biologically important areas. Carefully siting the activities proposed to occur in the range to avoid concentrations of vulnerable and endangered species and high abundances of marine life is the most critical step the Navy can take in reducing the environmental impacts of this project. However, because the Navy has failed to undertake an alternatives analysis that allows it to make an informed siting choice, the DEIS is inadequate and must be revised.	As described throughout Chapter 2 (Description of Proposed Action and Alternatives), geographic and seasonal flexibility is required to support evolving Navy training and testing requirements, which are linked to real world events. As described in Section 5.2.3.1 (Effectiveness Assessment) of the EIS/OEIS, a specific season, time of day, or geographic area must be important to the resource to determine whether the potential for establishing a mitigation area would be effective in avoiding or reducing a potential impact on a resource. In determining importance, special consideration will be given to those time periods or geographic areas having characteristics such as especially high overall density or percent population use, seasonal bottlenecks for a migration corridor, and identifiable key foraging and reproduction areas. The Navy proposes mitigation measures (a portion of which will include specific mitigation areas) on a case-by-case basis that would apply to all locations where a specified activity occurs. The balance between Procedural Measures and Mitigation Area measures provide a way for the Navy to mitigate potential impacts while maintaining its military readiness objectives. The proposed mitigation measures were developed in coordination with NMFS in order to avoid or reduce a potential impact on a particular resource. Please refer to Section 5.3.4.1.11 (Avoiding Marine Species Habitats) for further discussion of habitat avoidance.
NRDC - 82	Other Reasonable Alternatives	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	The DEIS should also consider other reasonable alternatives which could fulfill the Navy's purpose while reducing harm to marine life and coastal resources. For example: (1) The DEIS fails to include a range of mitigation measures among its alternatives. Many such measures have been employed by the U.S. Navy in other contexts, as discussed in Section IV; and there are many others that should be considered. Such measures are reasonable means of reducing harm to marine life and other resources on the proposed range, and their omission from the alternatives analysis renders that discussion inadequate. For instance, while safety zones are no substitute for geographic mitigation (which, as noted above, is the most effective means of reducing impacts on marine mammals), they do provide a form of last-recourse protection for any animals that are spotted near the array. The Navy must analyze safety zone enhancements outside critical points of its training and consider modifications in the safety zone provisions. We have noted several reasons in the past why expanding the safety zone would reduce the risk of near-array exposures: for example, (1) marine mammal groups are often spread out over a wide area, and animals may go undetected within the safety zone even if group members are only spotted outside; and (2) uncertainty remains over the thresholds and distances needed to cause hearing loss in some species. Given the Navy's defacto use of a wider safety zone in past exercises, it should consider how to provide for safety zone enhancements outside critical points of its training. In addition, the Marine Mammal Commission has repeatedly called for modifications in the safety zone provisions to allow sufficient time for animals to move out of the sound field. 63 MMC, Letter from Tim Ragen, Executive Director, Marine Mammal Commission, to P. Michael Payne, Chief, Permits Division, NMFS. Formal comments on MMPA proposed rulemaking, submitted Nov. 13,2008 (2008).(2) While we appreciate the Navy's plan to use range sensors and other passive acoustic platforms in limited instances, such efforts must be expanded. The Navy has failed to set forth an action plan and timeline in its EIS (and as part of its adaptive management under its current incidental take permits) to bring these sensors and platforms on line for purposes of more meaningful mitigation. Passive acoustic monitoring is one of the most effective available means of monitoring marine mammals in the vicinity of MFA sonar exercises and other sources of undersea noise.[64] Under the right conditions, it can significantly improve detectability of certain cryptic or deep-diving species. For example, while beaked whales are theoretically sightable only during the 8% of time that they are on the surface (and even then are unlikely to be spotted visually), some species vocalize over roughly 25% of their deep foraging dives.[65] NMFS, in its rulemakings, has repeatedly noted the mitigation potential of passive acoustic monitoring and the commitment of the Navy to technological development in support of this measure. 74 Fed. Reg. 3895.(3) The Navy's statement of purpose and need contains no language that would justify the limited set of alternatives that the Navy considers (or the alternative it ultimately prefers). Yet it is a fundamental requirement of NEPA that agencies preparing an EIS specify their project's "purpose and need" in terms that do not exclude full consideration of reasonable alternatives. 40	Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, and comments received via the EIS/OEIS public participation process. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	C.F.R. § 1502.13; City of Carmel-by-the-Sea v. United States Dep't of Transp. , 123 F.3d 1142, 1155 (9th Cif. 1997) (citing Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cif. 1991). "The existence of a viable but unexamined alternative renders an· environmental impact statement inadequate," Idaho Conservation League v. Mumma, 956 F.2d 1508, 1519 (9th Cir. 1992), and an EIS errs when it accepts "as a given" parameters that it should have studied and weighed. Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 667 (7th Cir. 1997).In sum, the DEIS shortchanges or omits from its analysis reasonable alternatives that might achieve the Navy's core aim of testing and training while minimizing environmental harm. For these reasons, we urge the Navy to revise its DEIS to adequately inform the public of all reasonable alternatives that would reduce adverse impacts to whales, fish, and other resources. 40 C.F.R. § 1502.1.	ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. The Navy has revised the mitigation zones used during training and testing activities as described in Section 5.3.2 (Mitigation Zone Procedural Measures).
NRDC – 83	The Navy Fails to Analyze the Impacts on Wildlife Viewing Interests and Recreation. Just as it fails to consider the direct, indirect, and cumulative impacts of increased training in the HSTT Study Area on the region's marine mammals and other fish and wildlife, the DEIS does not adequately consider the effects on wildlife viewing and other wildlife-dependent recreational interests. The DEIS makes no mention of the value lost from the harm to marine mammals that attract a number of our organizational members and members of the public to the potentially affected areas of Southern California and Hawaii. Nor does it address the potential economic value lost from decreased tourism (e.g., whale watching, cruise ships, etc.), particularly those areas centered on observing whales and other marine mammals in their natural habitats. One of NEPA's explicit purposes is to "assure esthetically and culturally pleasing surroundings," 42 U.S.C. 433	As stated in the approach to analysis (see Section 3.0.5 [Overall Approach to Analysis]), indirect impacts result when a direct impact on one resource induces an impact on another resource (referred to as a secondary stressor). If there is no direct impact on a resource, then indirect impacts are not foreseeable. Section 3.9 (Fish) concluded no long-term impacts to fish populations. The analysis in Marine Mammals (Section 3.4) and Socioeconomic Resources (Section 3.11) screened for any impacts on other resources that might create secondary impacts. Because the EIS/OEIS concluded there would be no impacts to fish populations, reduced catch rates and prey base were not addressed for Marine Mammals (Section 3.4) or

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	1(b)(2), and courts have made clear that an agency must adequately consider such recreational impacts in its NEPA analysis. See, e.g., Lujan v. NWF, 497 U.S. 871, 887 (1990) ("no doubt that recreational use and aesthetic enjoyment are among the sorts of interests NEPA [was] specifically designed to protect"); LaFlamme v. FERC, 852 F.2d 389, 401 (1988) (because "there were substantial questions raised regarding whether the project may significantly affect recreational use in the project area, and that FERC failed to explain or discuss" these impacts, the court found that "this record reflects a decision which is neither 'fully informed or well-considered,'" and therefore concluded the agency's decision not to prepare an EIS was unreasonable).	Socioeconomic Resources (Section 3.11). The biological resources sections (3.4 through 3.9) determined there would be no long-term impacts to populations, therefore not reaching the level of "harm" as to impact tourism activities.
NRDC - 84	Project Description and Meaningful Public Disclosure Disclosure of the specific activities contemplated by the Navy is essential if the NEPA process is to be a meaningful one. See, e.g., LaFlamme v. F.E.R.C., 852 F.2d 389, 398 (9th Cir. 1988) (noting that NEPA's goal is to facilitate "widespread discussion and consideration of the environmental risks and remedies associated with [a proposed action]"). For meaningful public input, the Navy must describe source levels, frequency ranges, duty cycles, and other technical parameters relevant to determining potential impacts on marine life. The DEIS provides some of this information, but it fails to disclose sufficient information about active sonobuoys, acoustic device countermeasures, training targets, or range sources that would be used during the exercises. And the DEIS gives no indication of platform speed, pulse length, repetition rate, beam widths, or operating depths-that is, most of the data that the Navy used in modeling acoustic impacts.	Information regarding source levels, frequencies, duty cycles, and other technical parameters have been provided in consideration of that which is necessary to conduct the analysis, and in consideration of protection of classified information. For more information on sonar system parameters, see Chapter 2 (Section 2.3.7, Classification of Acoustic and Explosive Sources). For descriptions of specific activities and the sources used for each activity, see Appendix A (Navy Activities Descriptions).
NRDC – 85	The Navy-despite repeated requests-has not released or offered to release CASS/GRAB or any of the other modeling systems or functions it used to develop the biological risk function or calculate acoustic harassment and injury.	The CASS/GRAB program is classified and not available for public release; however, approximate results can be obtained using other mathematical models commonly available to those with the technical expertise to utilize those tools. See the Criteria and Thresholds for U.S. Navy Acoustic and Explosive Effects Analysis Technical Report and the Determination of Acoustic Effects on Marine Mammals and Sea Turtles Technical Report which can be found at www.hstteis.com, for details on the development of the Navy Acoustic Effects Model and Criteria.
NRDC – 86	In addition, the Navy has also ignored repeated Freedom of Information Act requests regarding information and reports cited in the DEIS. These models, reports, and requests for information must be made available to the public, including the independent scientific community, for public comment to be meaningful under NEPA and the Administrative Procedure Act. 40 C.F.R. §§ 1502.9(a), 1503.1(a) (NEPA); 5 U.S.C. § 706(2)(0) (APA). In addition, guidelines adopted under the Data (or Information) Quality Act also require their disclosure. The Office of Management and Budget's guidelines require agencies to provide a "high degree of transparency" precisely "to facilitate	No reference has been provided and the Navy is unaware of any Freedom of Information Act requests on this topic that have not been responded to. Navy takes its regulatory responsibilities seriously and when a request is submitted, it is acted upon.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	reproducibility of such information by qualified third parties" (67 Fed. Reg. 8452, 8460 (Feb. 22,2002»; and the Defense Department's own data quality guidelines mandate that "influential" scientific material be made reproducible as well. We encourage the Navy to contact us immediately to discuss how to make this critical information available.	
NRDC - 87	Compliance With Other Applicable Laws A number of other statutes and conventions are implicated by the proposed activities. Among those that must be disclosed and addressed during the NEPA process are the following: (l) The Marine Mammal Protection Act ("MMPA"), 16 U.S.C. § 1361 et seq., which requires the Navy to obtain a permit or other authorization from NMFS or the U.S. Fish and Wildlife Service prior to any "take" of marine mammals. The Navy must apply for an incidental take permit under the MMPA, and NRDC will submit comments regarding the Navy's application to NMFS at the appropriate time. (2) The Endangered Species Act, 16 U.S.C. § 1531 et seq., which requires the Navy to enter into formal consultation with NMFS or the U.S. Fish and Wildlife Service, and receive a legally valid Incidental Take Permit, prior to its "take" of any endangered or threatened marine mammals or other species, including fish, sea turtles, and birds, or its "adverse modification" of critical habitat. See, e.g., IS36(a)(2); Romero-Barcelo v. Brown, 643 F.2d 835 (1st Cir. 1981), rev'd on other grounds, Weinberger v. Romero-Careeto, 456 U.S. 304, 313 (1982). Given the scope and significance of the actions and effects it proposes, the Navy must engage in formal consultation with NMFS and the U.S. Fish and Wildlife Service over the numerous endangered and threatened species that will be harmed from its activities. (3) The Coastal Zone Management Act, and in particular its federal consistency requirements, 16 U.S.C. § 1456(c)(1)(A), which mandate that activities that affect the natural resources of the coastal zone-whether they are located "within or outside the coastal zone"-be carried out "in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs." The Navy must fulfill its CZMA commitments along the California and Hawaii coasts. (4) The Magnuson-Stevens Fisheries Conservation and Management Act, 16 U.S.C. § 1801 et seq. ("MSA"), which requires federal agencies to "consult with the Secretary [of Commerce] with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken" that "may adversely affect any essential fish habitat" identified under that Act. 16 U.S.C. §1855 (b)(2). In turn, the MSA defines essential fish habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." 16 U.S.C. § 1802 (10). The HSTT Study Area contains such habitat. As discussed at length above, anti-submarine warfare exercises alone have the significant potential to adversely affect at least the waters, and possibly the substrate, on which fish in these areas depend. Under the MSA, a thorough consultation is required.(5) The Marine Protection, Research and Sanctuaries Act, 33 U.S.C. § 1401 et seq., which requires federal agencies to consult with the Secretary of Commerce if their	The Navy has addressed all of these statutes and conventions. Please see Section 3.0.1 (Regulatory Framework) for a complete list of Federal Statues and Executive Orders addressed in Chapter 3 (Affected Environment and Environmental Consequences) and Chapter 6 (Additional Regulatory Considerations). The Clean Water Act was addressed in Section 3.1 (Sediments and Water Quality) and the Clean Air Act was addressed in Section 3.2 (Air Quality). As part of this process, the Navy has consulted under the Marine Mammal Protection Act, Endangered Species Act, and Magnuson-Stevens Fishery Conservation Management Act. The Proposed Action did not warrant consultation under the Marine Protection, Research and Sanctuaries Act or the Migratory Bird Treaty Act. The Navy has submitted Determinations to California and Hawaii in compliance with the Coastal Zone Management Act. Chapter 6 (Additional Regulatory Considerations) has thoroughly addressed Marine Protected Areas (Section 6.1.2) under Executive Order 13158.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	actions are "likely to destroy, cause the loss of, or injure any sanctuary resource." 16 U.S.C. § 1434(d)(l). Since the Navy's exercises would cause injury and mortality of species, consultation is clearly required if sonar use takes place either within or in the vicinity of the sanctuary or otherwise affects its resources. Since sonar may impact sanctuary resources even when operated outside its bounds, the Navy should indicate how close it presently operates, or foreseeably plans to operate, to such sanctuary and consult with the Secretary of Commerce as required. In addition, the Sanctuaries Act is intended to "prevent or strictly limit the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities" (33 U.S.C. § 1401 (b», and prohibits all persons, including Federal agencies, from dumping materials into ocean waters, except as authorized by the Environmental Protection Agency. 33 U.S.C. §§ 1411,1412(a). The Navy has not indicated its intent to seek a permit under the statute.(6) The Migratory Bird Treaty Act, 16 U.S.C. § 703 et seq. ("MBTA"), which makes it illegal for any person, including any agency of the Federal government, "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory birds except as permitted by regulation. 16 U.S.C. § 703. After the District Court for the D.C. Circuit held that naval training exercises that incidentally take migratory birds without a permit violate the MBTA, (see Center for Biological Diversity v. Pirie, 191 F. Supp. 2ei 161 (D. D.C. 2002) (later vacated as moot», Congress exempted some military readiness activities from the MBTA but also placed a duty on the Defense Department to minimize harms to seabirds. Under the new law, the Secretary of Defense, "shall, in consultation with the Secretary of the Interior, identify measures-- (1) to minimize and mitigate, to the extent practicable, any adverse impacts of authorized military readiness activities on affected species of migratory birds; and (2) to monitor the impacts of such military readiness activities on affected species of migratory birds." Pub.L. 107-314, § 315 (Dec. 2,2002). As the Navy acknowledges, many migratory birds occur within the HSTT Study Area. The Navy must therefore consult with the Secretary of the Interior regarding measures to minimize and monitor the effects of the proposed range on migratory birds, as required.(7) Executive Order 13158, which sets forth protections for marine protected areas ("MPAs") nationwide. The Executive Order defines MPAs broadly to include "any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein." E.G. 13158 (May 26,2000). It then requires that "[e]ach Federal agency whose actions affect the natural or cultural resources that are protected by an MPA shall identify such actions," and that, "[t]o the extent permitted by law and to the maximum extent practicable, each Federal agency, in taking such actions, shall avoid harm to the natural and cultural resources that are protected by an MPA." Jd. The Navy must therefore consider and, to the maximum extent practicable, must avoid harm to the resources of all federally- and state-designated marine protected areas. The proposed activities also implicate the Clean Air Act and Clean Water Act as well as other statutes	

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	protecting the public health. The Navy must comply with these and other laws.	
NRDC - 88	Conflicts with Federal, State and Local Land-Use Planning NEPA requires agencies to assess possible conflicts that their projects might have with the objectives of federal, regional, state, and local land-use plans, policies, and controls. 40 C.F.R. § 1502.16(c). The Navy's training and testing activities may affect resources in the coastal zone and within other state and local jurisdictions, in conflict with the purpose and intent of those areas. The consistency of Navy operations with these land use policies must receive more thorough consideration.	The Navy has prepared Coastal Zone Management Act consistency determinations to ensure consistency with the enforceable policies of the applicable Coastal Zone Management Programs. Additionally, the Draft EIS/OEIS was submitted to each state adjacent to the Study Area for comment.
NRDC - 89	Appendix B – Impacts of Sonar	The issues addressed in this appendix were responded to directly within the NRDC comments above.
NRDC - 90	Appendix C – CRITIQUE OF THE NAVY'S ACOUSTICS ANALYSIS CRITIQUE OF THE RISK ASSESSMENT MODEL EMPLOYED TO CALCULATE TAKES IN THE HAWAII RANGE COMPLEX SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT David E. Bain, Ph.D. Abstract Rather than using a fixed received level threshold for whether a take is likely to occur from exposure to mid-frequency sonar, the Navy proposed a method for incorporating individual variation. Risk is predicted as a function of three parameters: 1) a basement value below which takes are unlikely to occur; 2) the level at which 50% of individuals would be taken; and 3) a sharpness parameter intended to reflect the range of individual variation. This paper reviews whether the parameters employed are based on the best available science, the implications of uncertainty in the values, and biases and limitations in the model. Data were incorrectly interpreted when calculating parameter values, resulting in a model that underestimates takes.	The analytical methodology used in this EIS/OEIS was developed in close coordination with NMFS for the Hawaii Range Complex EIS/OEIS finalized in 2009. Past actions also included rulemaking by NMFS and issuance of a five year Letter of Authorization under the Marine Mammal Protection Act using the methodology presented in that previous EIS/OEIS. The "Appendix C – Critique" presented in these most recent comments is almost a verbatim repeat of the same critique presented in 2008 and so the following responses are also necessarily repetitive of the responses provided previously. As noted previously, the analysis presented in the HSTT EIS/OEIS represents the best available and most applicable science with regard to analysis of effects to marine mammals from sound sources. While recognizing there is incomplete and unavailable information with regard to behavioral impacts on marine mammals (see Section 3.4.3, Environmental Consequences), the response function curve extends to 120 dB sound pressure level specifically to encompass uncertainty and the potential for behavioral reactions in marine mammal species that may be affected by sounds perceived at levels just above ambient.
NRDC - 91	Errors included failure to recognize the difference between the mathematical basement plugged into the model, and the biological basement value, where the likelihood of observed and predicted takes becomes non-negligible; using the level where the probability of take was near 100% for the level where the probability of take was 50%; and extrapolating values derived from laboratory experiments that were conducted on trained animals to wild animals without regard for the implications of training; and ignoring other available data, resulting in a further underestimation of takes.	NMFS, as a cooperating agency and in its role as the MMPA regulator, reviewed all available applicable data and determined there were specific data from three data sets that should be used to develop the criteria. NMFS then applied the response function to predict exposures that resulted in exposures that NMFS may classify as harassment. NMFS developed two risk curves based on the Feller adaptive risk function, one for odontocetes and pinnipeds and one for mysticetes, with input parameters of B = 120dB, K = 45, 99 percent point = 195 dB, 50 percent point = 165 dB.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 92	In addition, uncertainty, whether due to inter-specific variation or parameter values based on data with broad confidence intervals, results in the model being biased to underestimate takes.	The commenter provides no specifics on why the takes would be underestimated. There is much conservativeness (overestimation) built into the modeling process (refer to Finneran and Jenkins [2012]). Additionally, NMFS, as a cooperating agency and in its role as the MMPA regulator, reviewed all available applicable data and determined there were specific data from three data sets that should be used to develop the criteria. NMFS then applied the risk function to predict exposures that resulted in exposures that NMFS may classify as harassment. NMFS developed two risk curves based on the Feller adaptive risk function, one for odontocetes and pinnipeds and one for mysticetes, with input parameters of B = 120dB, K = 45, 99 percent point = 195 dB, 50 percent point = 165 dB.
NRDC - 93	The model also has limitations. For example, it does not take into account social factors, and this is likely to result in the model underestimating takes. This analysis has important management implications.	The commenter was concerned that if one animal is “taken” and leaves an area then the whole pod would likely follow. The model does not operate on the basis of an individual animal, does account for average group size, and quantifies the exposures NMFS may classify as takes based on the summation of fractional marine mammal densities. Because the model output does not consider the many mitigation measures that the Navy utilizes when it is using mid-frequency active sonar, to include mid-frequency active sonar power down and power off requirements should mammals be spotted within certain distances of the ship, if anything, it overestimates the amount of takes.
NRDC - 94	First, not only do takes occur at far greater distances than predicted by the Navy's risk model, the fact that larger areas are exposed to a given received level with increasing distance from the source further multiplies the number of takes. This implies takes of specific individuals will be of greater duration and be repeated more often, resulting in unexpectedly large cumulative effects. Second, corrections need to be made for bias, and corrections will need to be larger for species for which there are no data than for species for which there are poor data.	Modeling accounts for exposures NMFS may classify as takes at distances up to 180 kilometers as described in the Final EIS/OEIS Section 3.4.3 (Environmental consequences) and the Determination of Acoustic Effects on Marine Mammals and Sea Turtles for the Hawaii-Southern California Training and Testing EIS/OEIS technical report. These clearly demonstrate the modeling was conducted over a wide range of bathymetry, sound velocity profiles, and bottom classes. Using these sound propagation characteristics, modeling resulted in less than 1 percent of the exposures that NMFS may classify as a take occurring between 120 dB and 140 dB. Risk function data sets and the parameters, such as the basement values, were chosen to account for uncertainties and for species for which there was less or no data regarding hearing thresholds. The area encompassed by this sound propagation, as determined by NMFS for exposures that may constitute harassment, avoids a bias toward underestimation because the response function parameters were designed with this in mind.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 95	Third, the greater range at which takes would occur requires more careful consideration of habitat-specific risks and fundamentally different approaches to mitigation. The value of the model is that it provides a focus for future research on the effects of noise on marine mammals. In particular, the sensitivity analysis indicates the primary need for data is determining response probabilities of a wide range of species when exposed to received levels near the level at which 50% of individuals respond.	Section 5.3.4 (Mitigation Measures Considered but Eliminated) of the Final EIS/OEIS evaluates alternative or additional mitigations, specifically, as they relate to potential mitigation approaches. The examples of the fundamentally different approaches noted in the comment were addressed in this section of the Final EIS/OEIS. In addition, NMFS has identified general goals of mitigation measures. These goals include avoidance of death or injury, a reduction in the number of marine mammals exposed to received levels when these are expected to result in takes, a reduction in the number of times marine mammals are exposed when these are expected to result in takes, a reduction in the intensity of exposures that are expected to result in takes, and a reduction in adverse effects to marine mammal habitat. As discussed below, NMFS and Navy have identified mitigation measures that are practicable and reasonably effective. For example, the safety zones reduce the likelihood of physiological harm, the number of marine mammals exposed, and the intensity of those exposures. The Navy has determined that mitigation measures will likely prevent animals from being exposed to the loudest sonar sounds or explosive effects that could potentially result in temporary threshold shift or permanent threshold shift and more intense behavioral reactions (Final EIS/OEIS, Section 5.3, Mitigation Assessment). Mitigation measures that are practicable involve those that reduce direct physiological effects within the temporary threshold shift and permanent threshold shift thresholds.
NRDC - 96	The Navy distinguishes two types of takes: Level A, in which there is immediate injury or death; and Level B, in which there is no immediate injury, but cumulative exposure may lead to harm at the population level. However, in certain contexts, Level B harassment may lead to Level A takes through indirect mechanisms. The population effects of Level A takes on populations are relatively easy to assess, as individuals that are killed are obviously removed from the population, and those that are injured are more likely to die whenever the population is next exposed to stress.	This comment is a complete mischaracterization of the analysis presented in the EIS/OEIS. Navy does not anticipate any mortality from its activities. Though the model estimates the potential for mortality based on very conservative criteria, with the implementation of proven mitigation and decades of historical information from conducting training and testing in the study area, the likelihood of mortality is near zero and would not impact populations. Additionally, there is no evidence that the type of injuries that could potentially occur (fully recoverable or limited permanent threshold shift) have or will result in follow on mortality.
NRDC - 97	Temporary Threshold Shifts in captive marine mammals are commonly used as an index of physical harm (e.g., Nachtigall et al. 2003, Finneran et al. 2002 and 2005, Kastak et al. 2005). Limiting experimental noise exposure to levels that cause temporary effects alleviates ethical concerns about deliberately causing permanent injury. However, repeated exposure to noise that causes temporary threshold shifts can lead to	The vast majority of these level B takes are short term behavioral responses to relatively short–term activities. The population level impacts are fully discussed in the EIS/OEIS; see Sections 3.0 and 3.4 for the overall discussion, and Sections 3.0.5.7.1 and 3.4.3 for specifics.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	permanent hearing loss. In fact, chronic exposure to levels of noise too low to cause temporary threshold shifts can cause permanent hearing loss.	
NRDC - 98	Changes in behavior resulting from noise exposure could result in indirect injury in the wild. A variety of mechanisms for Level B harassment to potentially lead to Level A takes have been identified.	In prior rulemakings, NMFS established that exposures resulting in Level A and B harassment cannot be considered to overlap, otherwise the regulatory distinction between the two criteria would be lost and the required quantification of takes would be ambiguous. To facilitate the regulatory process, the Final EIS/OEIS maintained a clear and distinct division between Level A and Level B Harassment as required by NMFS.
NRDC - 99	Captive cetaceans Studies of captive marine mammals provide an excellent setting for identifying direct effects of sound. E.g., one of the datasets employed by the Navy consists of studies relating short-term exposure of bottlenose dolphins and belugas to high levels of noise to Temporary Threshold Shifts. The Navy (Dept. Navy 2008b, p 3-7) noted aggressive behavior toward the test apparatus, suggesting stress was another consequence of the test (see also Romano et al. 2004). Such effects would be unconditional results of noise exposure. However, extrapolation of the level at which aggression was observed to the level at which behaviorally mediated effects might occur in the wild is problematic, as this depends on how well trained the subjects were. For example, the Navy has been a leader in training dolphins and other marine mammals to cooperate with husbandry procedures. Tasks like taking blood, stomach lavage, endoscopic examination, collection of feces, urine, milk, semen and skin samples, etc. once required removing individuals from the water and using several people to restrain them. With training, painful and uncomfortable procedures can be accomplished without restraint and with a reduction in stress that has significantly extended lifespans of captive marine mammals (Bain 1988).	The Navy and NMFS relied upon best available science to derive the behavioral response function. The data used were based on one captive animal study and two studies that involved observations of wild animals exposed to sonar or sonar-like signals.
NRDC - 100	12. Right whales exposed to alerting devices consistently responded when received levels were above 135 dB re 1 µPa. Due to the small sample size (six individuals), it is unclear whether this is close to the 50% risk, the 100% risk level, or both. These data do not allow identification of B, as lower exposure levels were not tested. In mysticetes exposed to a variety of sounds associated with the oil industry, typically 50% exhibited responses at 120 dB re 1 µPa. Thus right whales may be similar to killer whales.	Results of the research by Nowacek et al. (2004) indicated that right whales reacted to multiple "alert stimuli" which were developed specifically to elicit a response. These stimuli had a limited similarity to Navy sonar systems. In addition, Nowacek et al. was one of three primary references used to derive the risk function curve which accounts for effects down to 120 dB sound pressure level. Navy disagrees that there is any science indicating that “mysticetes exposed to a variety of sounds associated with the oil industry, typically 50% exhibited responses at 120 dB re 1 µPa.” If in reference to Malme et al. (1983, 1984) as cited elsewhere in the critique, then those studies in fact indicated that for migrating whales, a 50-percent probability of response occurred at 170 dB for a continuous, low frequency sound source.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC – 101	See Table 1: Bain Appendix H Datasets not considered The Navy incorrectly concludes that additional datasets are unavailable. In addition to the other killer whale datasets mentioned above, data illustrating the use of acoustic harassment and acoustic deterrent devices on harbor porpoises illustrate exclusion from foraging habitat (Laake et al. 1997, 1998 and 1999, Olesiuk et al. 2002). Data are also available showing exclusion of killer whales from foraging habitat (Morton and Symonds 2002), although additional analysis would be required to assess received levels involved. The devices which excluded both killer whales and harbor porpoises had a source level of 195 dB re 1 ~a, a fundamental frequency of 10kHz, and were pulsed repeatedly for a period of about 2.5 seconds, followed by a period of silence of similar duration, before being repeated. Devices used only with harbor porpoises had a source level of 120-145 dB re 1 Pa, fundamental frequency of 10 kHz, a duration on the order of 300 msec, and were repeated every few seconds. Harbor porpoises, which the Navy treats as having a B+K value of 120 dB re µPa (with A large enough to yield a step function) in the AFAST DEIS (Dept. Navy 2008a), 45 dB lower than the average value used in the HRC SDEIS, may be representative: of how the majority of cetacean species, which are shy around vessels and hence poorly known, would respond to mid-frequency sonar. Even if harbor porpoises were given equal weight with the three species used to calculate B+K, including them in the average would put the average value at 154 dB re 1 µPa instead of 165 dB re 1 µPa.	The data sources these comments present as requiring such consideration involve contexts that are neither applicable to the proposed actions nor the sound exposures resulting from those actions. For instance, the comments' citation to Lasseau et al. involve disturbance to a small pod of dolphins exposed to 8,500 whale-watching opportunities annually. This is nothing like the type or frequency of action that is proposed by the Navy for the HSTT Study Area. Navy training involving the use of active sonar typically occurs in situations where the ships are located miles apart, the sound is intermittent, and the training does not involve surrounding the marine mammals at close proximity. Furthermore, suggestions that affect from acoustic harassment devices and acoustic deterrent devices, which are relatively continuous, high frequency sound sources (unlike mid-frequency active sonar) and are specifically designed to exclude marine mammals from habitat, are also fundamentally different from the use of mid-frequency active sonar. Finally, reactions to airguns used in seismic research or other activities associated with the oil industry are also not applicable to mid-frequency active sonar, since the sound or noise source, its frequency, source level, and manner of use is fundamentally different.
NRDC – 102	14. An important property of the model is that the biologically observed basement value is different than the mathematical basement value. The Navy proposes using 120 dB re 1 µPa as the basement value. They indicate the selection of this value is because it was commonly found in noise exposure studies. 15. For example, many looked at changes in migration routes resulting from noise exposure, and found that 50% of migrating whales changed course to remain outside the 120 dB re 1 µPa contour (Malme et al. 1983, 1984). These results might be interpreted in several ways. They could be seen as minor changes in behavior, resulting in a slight increase in energy expenditure. Under this interpretation, they would not qualify as changes in a significant behavior, and are irrelevant to setting the basement value. They could be interpreted as interfering with migration, even though the whales did not stop and turn around, and hence 120 dB would make an appropriate B+K value rather than B value. Third, the change in course could have been accompanied by a stress response, in which case the received level at which the course change was initiated rather than the highest level received (120 dB re 1 µPa) could be taken as the biological basement value.	These comments are factually inaccurate. The single citation provided for the repeated assertion that 50 percent of marine mammals will react to 120 db re 1uPa is Malme et al. (1983, 1984). Malme et al. (1983, 1984) in fact indicated that for migrating whales, a 50-percent probability of response occurred at 170 dB for a continuous, low frequency sound source that is very different from mid-frequency active sonar. Additionally, based on recent work at the Atlantic Undersea Test and Evaluation Center and SOCAL (Southall et al. 2007 and Tyack et al. 2011), with the exception of beaked whales there is no evidence to suggest the 120 dB basement value is incorrect, and for beaked whales a 140 dB receive level step function criteria was chosen.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
NRDC - 103	See Table 2: Bain Appendix Take numbers are based on Alternative 3 in the Hawaii Range Complex SDEIS (Dept. Navy 2008b), which in turn is based on the No Action Alternative, Table 3.3.1-1. Where the number of takes approaches the size of the population, the actual number of takes will be smaller than shown in the table. However, individuals will be taken multiple times and the duration of takes will be longer than if the calculated number of takes were small. Presumably, longer and more frequent takes of individuals will have more impact on the population than takes due to single exposures. See Table 3: Bain Appendix H Table 3. Sensitivity analysis based on a model with spherical spreading for 2 km followed by cylindrical spreading.	The vast majority of these level B takes are short term behavioral responses to relatively short term activities. The population level impacts are fully discussed in the EIS/OEIS. See Sections 3.0 and 3.4 for the overall discussion, and Sections 3.0.5.7.1 and 3.4.3 for specifics.
Ocean Conservation Research-01 (Written)	Please include the following comments into the record for both the HSTT DEIS and the AFTT DEIS. In preparing, this critique we have had the opportunity to review the comments from our colleagues at the Natural Resources Defense Council (NRDC) to both the HSTT and AFFT DEIS's. We find them thorough, thoughtful, comprehensive, and complete. Rather than overlap their efforts, let it stand that we fully endorse their work on these reviews. We always appreciate the opportunity to review and comment on proposed activities of the US Navy, although we find that the concurrent issuance and simultaneous closure of the public comment period for the Hawaii-Southern California Testing and Training (HSTT) and the Atlantic Fleet Training and Testing (AFTT) DEIS places a significant and we believe unreasonable burden on the resources of those of us who have made it our work to review, comment, and inform the public about how their tax dollars are spent.	The Navy has complied with all NEPA notification requirements under 40 C.F.R. § 1506. NEPA regulations require that agencies not allow less than 45 days for comments on a Draft EIS/OEIS. Please note that public comments are very important to the NEPA process. The Navy included an extra 15 days for review of this document for an extended comment period of 60 days total.
OCR-02	As always we have concerns about the impacts of the proposed activities, and in the case of both of the HSTT and AFTT DEIS we are particularly concerned, given that the estimated take numbers are so extremely high. In reviewing these documents we found that the numbers were high because the drafters of the documents dug deeply into the literature and presented their estimations based on both more thorough as well as more current peer reviewed literature. This is a breath of fresh air from our previous experiences in reviewing US Navy DEIS documents wherein the peer-reviewed papers substantiating the positions in the documents were either outdated, based on questionable premises, and/or the assumptions made about impacts were short-sighted or woefully inadequate. We congratulated this new candor in the HSTT- DEIS to our community on its original release, figuring that the Navy N-45 Environmental Preparedness Group was coming to terms with the fact that mitigating for bad public opinion was more costly than "'doing the right thing." This was particularly in light of the recent US Navy Public Relations sobriquet of "A force for good."	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
OCR-03	That being said, upon deeper review of the documents our concerns are redoubled, because while there is more overall candor in the document, the assumptions that	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	destroying so much marine life for the expediency of the perceived Navy mission is completely unacceptable. While it may be arguable in the regulatory setting of the Marine Mammal Protection Act that "Level B" behavioral adaptations to proposed activities would be disruptive but recoverable, there is absolutely no justification for biological damage indicated in a "Level A" harassment. Even short-term "recoverable" assaults such as temporary threshold shift (TTS) are barbaric. Asking the National Marine Fisheries Service or the Marine Mammal Commission to issue "Incidental Harassment Authorizations" or "Take Permits" for "Level A" harassment is the apex of institutional hubris. If someone were to apply to the Department of Health and Human Services for a permit to yell in someone else's ear, or spill spent ordinance in their salad they would be watched cautiously and put on some "security risk list." So why is the US Navy encouraged to apply for permission to damage animals? It is patently unethical to damage an animal unless you are going to eat it, or it is going to eat you.	Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. All mitigation measures are designed to reduce or avoid potential impacts to marine resources, taking into account national security interests, the best available science, and regulatory requirements (including the MMPA and ESA). Additional information on the development of mitigation measures can be found in Section 5.2.2, (Overview of Mitigation Approach). Furthermore, the Navy has invested a significant amount of funding and support for marine mammal research.
OCR-04	We understand the need for a robust military to defend our shores and guard against unlawful international activities on the high seas. We also understand that we do not want to send our military personnel into harm's way without assuring their utmost safety. But the US military- particularly the Navy - is the most powerful fighting force on the planet, unparalleled by even the combined forces of the next eight global military powers - many of which are current allies. Of course it is always the desire for a military force to be "invincible." But invincibility should always be framed in the context of the scale of the threats, in the the costs to society, and increasingly in terms of the cost to our global environment. It should also be weighed in terms of the effectiveness and costs of the alternatives. Because in addition to the hefty costs of over-blown military invincibility, the risk is that it easily becomes a rationale for the military action to become the "action of choice," overshadowing less costly alternatives for conflict resolution such as diplomacy, or social and economic pressures. If there remains the chance that our military personnel will suffer or die in an action, there then remains a high incentive to engage in diplomacy or socio-political actions. If our military can just "pound our perceived threats into oblivion" it will then fall upon our own citizens to attempt to stop the carnage. This is a very ineffective strategy for democratic engagement because we have repeatedly seen that in the heat of perceived conflict the voices of our citizens fade behind the roar of war. I need not point any further than our reckless engagement with Iraq in 2002 based of false assumptions with the huge collateral costs to our economy and the destabilization of global security as an example. While we are not military strategists, nor are we privy to the long-term political objectives of our government, we are as citizens qualified to add our philosophical voice to this discussion. This is particularly in light of the fact that we find the assumptions used to justify the continuous expansion of US Navy warfare training ranges throughout US sovereign waters so egregious, short sighted, and reckless as to almost not warrant any further comment, except to say the since the decommissioning of the US Training Range in Vieques, Puerto Rico, that the	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The discussion of interaction with commercial fisheries is included in the description of the baseline as an essential component used to inform a complete discussion on the status and threats to species. The Navy activities are compared against this baseline.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	US Nave has been making the entire US Sovereign waters a "Warfare Training Range." The HSTT-DEIS and AFTT-DEIS are further evidence of this relentless expansion and begs philosophical feedback because aside from the scientific candor in estimated take levels, there is an assumption that this is "OK." One of the arguments used in the DEIS to justify the high take levels is the comparison implied throughout the entire "Affected Environment" Sections 3 as well as in the executive summaries that commercial fisheries interactions through entanglements and by-catch exact much higher impacts on marine mammals, fish, invertebrates, and turtles than the proposed military actions as to render the military actions insignificant. This is a hollow argument; while the take numbers may indicate that the military actions are the "lesser of two evils," it does not justify any of the deliberate carnage of marine life by the Navy. The determinations of "acceptable" take numbers are predicated on the assumption that given the various population densities of the subject animals, that an "incidental, but not intentional, taking by citizens while engaging in that activity within that region of small numbers of marine mammals of a species or population stock [is allowed] if the Secretary ... finds that the total of such taking during each five-year (or less) period concerned will have a negligible impact on such species or stock."[3] This regulatory framework defined in the Marine Mammal Protection Act (MMPA) was modified to accommodate "military readiness activity [with] a determination of “least practicable adverse impact on such species or stock."	
OCR-05	This accommodation is not an exemption or release from the MMPA, rather it is an opportunity to evaluate the proposed actions in the context of “personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity."[5] This clause provides for deeper consideration of the environmental costs of the action with the safety and effectiveness of the desired outcomes in mind. It is through this that the US Navy's "Force for Good" could really shine, because the US Navy through its resources and funded studies of ocean physics, chemistry, marine habitat and biology has developed a broad palate to examine the potential impacts of their actions. This is an opportunity that is not being taken the HSTT and AFTT OBIS's. While the evaluations reveal a new candor, the proposed alternatives don't express responsiveness to the estimated impacts. Nor do they reflect anthropogenic impacts that we know about, that are increasingly becoming evident, but are just recently entering into of the literature.	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes the chosen alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission. The EIS/OEIS uses best available science as described in Section 3.0.5 (Overall Approach to Analysis).
OCR-06	For example: while the synergistic and cumulative impacts of human activities are beginning to make way into the Environmental Impact Statement discussions, so far	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	there is no metric examining the intermediate and long term health effects induced by our ever increasing agonistic activities on marine life. It is quite clear that we are compromising marine habitats through chemical pollution. Animals at the top trophic levels are becoming toxic to the point that a stranded whale or dolphin runs the possibility of being an Environmental Protection Agency-rated "toxic waste site," and food animals once considered 'delectable' are no longer safe for human consumption. A similar concern lies in the impacts of noise pollution. Even when the impacts are not mortal or "permanent" we are inducing noise-related stress on marine animals[6] that most probably compromises their ability to survive and proliferate. Much of this is pointed out in the Sections 3 "Affected Environment" and particularly in the Sections 3.4 Marine Mammal sections where the more recent papers on behavioral impacts of noise exposures are sited. It is clear from the more recent work that behavioral impacts occur at much lower levels and at greater distances than what is used as the threshold for MMPA "Level B" exposure.	a robust Cumulative Impacts analysis (Chapter 4).
OCR-07	It is clear that we are compromising their habitat, increasing stress levels, displacing them from preferred feeding, social, and breeding areas, and compromising their ability to communicate, navigate, proliferate, and ultimately survive by the short-sighted priorities of our military-industrial and commercial economy. In this context we should not be doing a comparative analysis on whether fishing, shipping, or Naval warfare training has a greater impact on marine habitat, rather we need to examine how the additional disruptions further compromise an already stressed environment.	The discussion of general threats to resources is included in the description of the baseline as an essential component used to inform a complete discussion on the status and threats to species. The Navy activities are compared against this baseline.
OCR-08	If more "biological bandwidth" is required to assure our national security and health of our marine food supply, the Navy is in the best place to promote less impactful marine technologies, and enforce regulations that decrease unlawful commercial and industrial impacts on the habitat. Throughout my 20 year experience of reviewing and critiquing US Navy and other agency Draft Environmental Impact Statements I have taken the allotted public comment period to comb through the proposals, examining the assumptions, deconstructing the models, and evaluating the supporting documentation. Typically I have offered comments on the shortcomings, obfuscations, deceptions, and programmatic deceits set into the agencies' responses to their NEPA mandated requirements to explore the environmental impacts of their proposed actions.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
OCR-09	This case is different, largely due to the comprehensive and thorough examination of the literature in the two DEIS. While I find it annoying that these were let out concurrently I do appreciate the "candor" of the drafts. What I find extremely troubling is that with all of the facts, models, and assumptions presented in the documents that the Navy is not paying heed to what they have concluded: that millions of marine mammals and countless fish and marine invertebrates will be maimed, poisoned, or killed by the	The HSTT EIS/OEIS analyses and conclusions are based on best available science and do not support your comment. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	proposed actions. They have not considered that over the intermediate to long term the practices of the US Navy proposed in the HSTT and AFTT DEIS's will contribute significantly to the collapse of marine ecosystems. And they have not conceded that these environmental compromises will have a significantly deeper negative impact on global security. In our review of the HSTT and AFTT DEIS we find profound evidence that the economic and environmental costs are excessive, particularly in a time when both the US economy and the ocean environment are under deep duress. We advise that in both the Hawaii Southern California Training and Testing and the Atlantic Fleet Training and Testing areas that the "No Action" alternative be selected.	described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements, to the maximum extent practicable, mitigation measures during its training and testing activities. Though the intensity of training and testing will increase, the events are of relatively short duration. Based on the analysis of potential impacts and associated mitigation measures, the Navy does not anticipate long-term, population level impacts to marine animals. The Navy used the best available and most applicable science to analyze potential environmental impacts to every resource. The Navy is studying the long-term population effects of sonar as stated in Section 5.5 (Monitoring and Reporting). Additionally, Navy has been conducting these types of training activities for decades and there is no evidence to support this comment.
Save the Whales-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals. Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The Navy is proposing to implement several mitigation measures within pre-defined habitat areas in the Study Area. For the purposes of this document, the Navy will refer to these areas as “mitigation areas.” As described throughout this section, these recommended mitigation areas may be based off endangered species critical habitats, endangered species reproductive areas, or bottom features. The size and location of certain habitat areas, such as the critical habitats, is subject to change over time; however, the Navy’s effectiveness and operational assessments and resulting mitigation recommendations are entirely dependent on the mitigation area defined in this document. Therefore, it is important to note that the Navy is recommending implementing mitigation measures only within each area as described in this document. Applying these mitigations to additional or expanded areas could potentially result in an unacceptable impact on readiness.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Save the Whales-02	I understand that for safety & security purposes ship hulls need to be tested for strength. However, believe if we can send men to the moon & can have humans orbit our planet on a space station, we can find a way to test ships without causing harm to the ocean-life we've not yet exterminated. I'm from a NASA town & grew up in a NASA family so I know our government has the know-how. Perhaps funding could be diverted from the testing to find out why monkeys fling their poop. Don't laugh, this is listed as a current legitimate budget expense of our government. We can't keep killing off these amazing creatures in our	The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Sierra Club (Bigger)-01 (Written)	INTRODUCTION Thank you for the opportunity to comment on this very comprehensive document. We also appreciate the efforts of the Navy to engage the public in review of this document, including the hosting of public open house public meetings at various locations throughout the affected region. We recognize and appreciate the contributions of our armed services personnel, including the U.S. Navy, in providing for the security of our homeland under increasingly complex conditions. That includes the difficult task of seeking to balance the duties of providing such security while also fulfilling their responsibilities as environmental stewards. As citizens of the United States, we value our freedom and security. We also value our relationships with whales, dolphins, sea turtles, sea birds, and other creatures with which we share the Planet. They are more than just "natural resources." Strong, adequate, measures are necessary to avoid or minimize risks the Navy's training and testing activities pose to marine species and their habitats, as they also face increasing stresses in coming years from climate change impacts -- including rises in sea levels, and increases in sea temperatures and ocean acidification-- and from the cumulative impacts of increased uses of coastal waters for wind energy projects, oil and gas exploration, and other human activities.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
Sierra Club (Bigger)-02	GENERAL COMMENTS We are quite concerned over the potential toll the planned Testing and Training activities described in this DEIS could exact on marine mammals, sea turtles, other species and their habitats. Unfortunately, we do not consider the mitigation measures described in this DEIS to be sufficiently strong or adequate.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and the permitting process with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Sierra Club (Bigger)-03	In addition to our own study of this document, we have reviewed and endorsed the comments on this DEIS submitted by the National Resources Defense Council (NRDC). We agree with their conclusion that this DEIS must be revised as necessary to comply with NEPA requirements, including development of alternatives that incorporate spatial and temporal mitigation measures. The DEIS shows in considerable detail that either Alternative I and Alternative 2 (the Preferred Alternative) would constitute very large increases in the, scope, scale, and impacts of activities compared to the baseline levels of the No Action Alternative. In particular the DEIS projects large increases in "takes" under the provisions of the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). Ultimately, the National Marine Fisheries Service will need to establish take limits through authorization letters in compliance with the MMPA and the ESA. As the DEIS notes, NMFS may require additional mitigation measures as conditions for issuing an MMPA (and, presumably, ESA) letter of authorization: "In order to make the findings necessary to issue an MMPA Letter of Authorization, it may be necessary for NMFS to require additional mitigation measures or monitoring beyond those contained in this Draft EIS/OEIS. These could include measures considered, but eliminated in this EIS/OEIS, or as yet undeveloped measures. The public will have an opportunity to provide information to NMFS through the MMPA process, both during the comment period following NMFS' notice of receipt of the application for a letter of authorization, and during the comment period following publication of the proposed rule. NMFS may propose additional mitigation measures or monitoring in the proposed rule." (ES-12) While this quote suggests that NMFS might require more stringent measures than contained in this DEIS, we concur with NRDC that the DEIS itself should identify such measures as alternatives to be considered.	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4 [Purpose and Need for Proposed Military Readiness Training and Testing Activities]) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission.
Sierra Club (Bigger)-04	2. Inadequacy of Visual Detection as a Mitigation Measure Use of lookouts and other visual detection methods as mitigation measures may be necessary, but are not sufficient in the case of numerous species whose presence is difficult to detect visually. For example, under either Alternative 1 or Alternative 2, the Hawaiian stock of Cuvier' s beaked whale is projected to receive 52,110 Behavioral exposures out of a total of 112,752 for all Hawaiian stock species. This equates to 46%, almost half, of the total. The study area abundance for this species is 15,242, so these impacts are very	The Navy acknowledges the limitations of visual shipboard monitoring and uses aerial monitoring and passive acoustic monitoring for multi-faceted monitoring where practical. The EIS/OEIS, Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), presents the U.S. Navy's mitigation measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training events. In general, there are usually more ships and more observers present on Navy ships, and additional aerial assets

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	significant as a percentage of the total population. The Occurrence in the Study Area is described as "Year-round occurrence but difficult to detect due to diving behavior "6 The Dwarf sperm whale accounts for 20,569 out of a total of 30,292 TTS exposures -- 67% of the total. It accounts for 60 out of 63 PTS exposures- 95% of the total. The study area abundance for this species is 17,519, so these impacts are also very significant as a percentage of the total population. It appears that the population, or at least a portion of the population, will be subject to multiple exposures at levels affecting their auditory functions. The Occurrence in the Study Area is described as "Stranding numbers suggest this species is more common than infrequent sightings during survey (Barlow 2006) indicated." This suggests that even trained scientists seeking to assess population sizes have difficult spotting this species visually. Cuvier's beaked whale and the Dwarf sperm whale are both "cryptic" species difficult to spot" because they are not very active at the surface and do not have a conspicuous blow)."7 It is clear that the use of lookouts or other visual detection methods are not sufficient for the populations most affected by Training activities in the Hawaiian Area Complex. As disturbingly high as these exposures are, they are likely understated since they do not include exposures from Testing or other activities. We have not had sufficient time to perform the required calculations, which require compiling exposure data from two, and possibly more, separate tables scattered throughout the DEIS. Nor should reviewers such as us- or, ultimately, NMFS -- have to perform such additional steps in order to get useful information out of the huge amounts of fragmented data contained in this DEIS. The revised, reissued, version of this DEIS must contain tables showing total impacts per species from all sources as well as ratios of exposures to total population sizes. Such tables would be necessary for determining what levels of take would be acceptable under the MMPA or ESA, and would direct decision makers to the areas requiring additional or more effective mitigation measures.	engaged in exercise events than used during trackline detection during a survey, thereby increasing the potential to detect marine mammals during a Navy activity. Section 3.4.3.1.8.4 (Model Assumptions and Limitations) in the Final EIS/OEIS provides a more robust discussion on marine mammal sightability and the inclusion of implementing mitigation measures to reduce the effects of sound exposures on marine mammals. Section 3.4.3.2 (Analysis of Effects on Marine Mammals) has been revised to account for the Navy's mitigation measures and marine mammal behavioral responses to sound in the water to more accurately reflect the predicted potential effects on marine mammals. In addition, for species-specific take requests permitted under MMPA for activities covered by the HSTT EIS/OEIS, please see the complete Letter of Authorization at the NMFS website: http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications
Sierra Club (Bigger)-05	3. Concerns over impacts to Gray whale populations in SOCAL The DEIS shows high estimated exposures for the Gray whale population, including considerable instances of PTT relative to the population size. As stated in the DEIS, the "Population migrates through SOCAL, with the occurrence in SOCAL described as "Transient during seasonal migrations. "8 According to the DEIS, the Gray whale population is estimated at I 8,813. Combined Training and Testing exposures under the No Action Alternative are estimated to be 1,077 Behavioral, 1,401 ITS, and 0 PTS. Those impacts relative to the population size are 6%, 7%, and 0% respectively. Combined Training and Testing exposures under Alternative 1, are 3,816 Behavioral 7,358 TTS, and 25 PTS. Those impacts relative to the population size are 21%, 39%, and 0.1% respectively. The increases relative to the No Action Alternative are 359% for Behavioral and 525% for ITS. Combined Training and Testing exposures under Alternative 2, are 3,911 Behavioral	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	7,645 TTS, and 25 PTS. Those impacts relative to the population size are 21%, 41%, and 0.1% respectively. The increases relative to the No Action Alternative are 363% for Behavioral and 546% for TTS. Clearly, use of a temporal closure for at least key portions of the SOCAL area appears warranted for reduction of impacts to the Gray whale population transiting the SOCAL.	to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sierra Club National Marine Action Team-01 (Written)	Aloha, my name is Dave Raney, and I am Team Leader of the Sierra Club's National Marine Action Team. The Sierra Club is soliciting comments from our affected Chapters and will submit written comments on this DEIS, and the Atlantic Fleet Training and Testing DEIS. This evening I will make a few preliminary comments. First, we recognize and appreciate the contributions of our armed services personnel, including the U.S. Navy, in providing for the security of our homeland under increasingly complex conditions. That includes the difficult task of seeking to balance the duties of providing such security while also fulfilling their responsibilities as environmental stewards. We value our freedom and security. As Pacific Islanders in particular, we also value our relationships with whales, dolphins, sea turtles, sea birds, and other creatures with which we share the Planet. They are more than just "natural resources" and we ask your help in protecting them from risks your training and testing activities may pose, as they also face increasing stresses in coming years from climate change impacts -- including rises in sea levels, and increases in sea temperatures and ocean acidification. You have invited our help in improving this DEIS. Here are two suggestions: 1. Use coastal and marine spatial planning tools, as promoted by the National Ocean Policy, to address the conflicts this DEIS attempts to address. NOAA and the Navy have a broad array of applicable tools, including a geographic information system data base showing the densities of marine mammal and sea turtle species found in specific areas. Avoiding areas of high population densities through the use of spatial planning, or zones, such as the National Marine Fisheries service proposed monk seal critical habitat, would be much more effective than the heavy reliance the DEIS currently places on the use of lookouts and limited area mitigation zones.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.3 (Simulated Training and Testing) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.” Coastal and marine spatial planning is a tool under development by the National Ocean Council (NCO) which includes all federal agencies and is co-chaired by the CEQ Chair and Director of Office, Science,

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
		Technology and Policy. CMSP is a team effort by the NOC and its staff in coordination with all the NOC members. Navy continues working with the NOC Staff and other members to implement the National Ocean Policy in accordance with Executive Order 13547. Additional information on the status of the National Ocean Policy can be obtained at http://www.whitehouse.gov/administration/eop/oceans/policy. The DoD has been and will continue to be actively involved in the National Ocean Policy process. The mitigation measures listed in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS are the result of the consultation with NMFS and USFWS. The Navy proposes to implement both area-specific mitigations and activity-specific mitigations. For a discussion of area-specific mitigations, please see Section 5.3.3 (Mitigation Areas) of the Draft and Final EIS/OEIS. To supplement the Navy's proposed Mitigation Areas, activity-specific procedural mitigation measures (see Section 5.3.1, Lookout Procedural Measures and Section 5.3.2, Mitigation Zone Procedural Measures) will apply year round at each activity location. The balance between Procedural Measures and Mitigation Area measures provide a way for the Navy to mitigate potential impacts while maintaining its military readiness objectives. Refer to Chapter 4 (Cumulative Impacts) for a discussion of the additive effects of all projects in the Study Area.
Sierra Club National Marine Action Team-02	2. Abandon the SINKEX program of sinking obsolete ships in our waters. We note that each of the three alternatives includes the possible sinking of up to six ship hulks in the Hawai'i Range Complex through use of the SINKEX project. We urge the Navy to abandon the wasteful and environmentally threatening practice of sinking ships that still contain remnant amounts of PCBs even after meeting what we consider to be inadequate cleanup standards required by the EPA. This DEIS rules out several potential mitigation measures because they would make a training practice "unrealistic." The use of SINKEX involves sinking a large, unarmed, stationary vessel incapable of attempting evasive maneuvers or employing electronic countermeasures. This fails the requirement for realism, just as shooting a grazing cow would not adequately prepare one for duck hunting. SINKEX has provided a small percentage of trainees the experience of watching live weapons send very large ships to the bottom of the ocean. That experience passes with time, while the ship that was sunk permanently joins what has become the underwater equivalent of an elephant's graveyard on our seabed. There are more than a dozen such ships sunk within the Hawai'i Range Complex, most of them due north of the island of Kaua'i. Surely this is not an acceptable environmental legacy for the Navy, and we urge that you abandon the use of SINKEX from this time forward.	The SINKEX is an essential component of the suite of training activities to ensure that Sailors and Marines are ready to deploy in real world operations. The Navy must comply with the Office of the Chief of Naval Operations (OPNAV) Instruction 1541.5, which limits SINKEXs to those required to satisfy specific requirements for ship survivability or weapons lethality evaluation (required by Title 10, Section 2366 for major system or munitions programs), major joint or multi-national exercises, or the evaluation of new multi-unit tactics or tactics and weapons combination. Environmental preparation of SINKEX vessels is in accordance with EPA permits and additional guidance. As stated in Section 1.4.2 (Fleet Readiness Training Plan), the Fleet Readiness Training Plan outlines the training activities required for military readiness that prepares Navy personnel for any conflict or operation. The Navy's building-block approach to training is cyclical and qualifies its personnel to perform their assigned missions. The value of a SINKEX goes beyond engaging a maneuvering target and the lessons learned are passed to other members of the fleet.

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
Sirius Institute and Planet Puna (Oral)	Okay. Well, thank you for letting me speak here. I hope my input can have some value. Star Newland and I, through the Sirius Institute and Planet Puna, have been studying mostly the effects of birth and general birth and water birth on the constitution of humans. And one of the major experts in underwater birth and birth in general is a French medical doctor named Dr. Michel Odent. And he points out that nearly all cultures have messed around with the birth imprint or the birthing process. For example, some cultures will express the mother's colostrum and throw it away to make sure that the baby never has it in spite of the fact it's the most helpful thing it could get right at birth. Other cultures would put sand, salt, bread, sugar, rice, anything other than milk as the first taste for an infant. So we have planet-wide messed up the process of birth. Recently -- well, not recently but over the last decades, they've been using more and more synthetic Oxytocin, Pitocin, and it's causing great fetal distress, but it also messes up the bonding and the suckling between the mother and infant. So we are rapidly losing the ability to give birth properly. The punchline of this is when you do this to an infant, since the type of life they have is dependent on their birth imprint, you end up -- if you interfere with birth in a major way like we've been doing, you end up with people that have missed connecting with their mothers, with the Earth, and they are great warriors, and they are traumatized. They're enraged, and they're ready to kill at some point because we have messed up their birth imprint. So we have fallen into this, and that might be one of the major reasons why we have such a warlike planet. So fortunately the Navy has agreed to partner with Star Newland and the Sirius Institute for domestic harmony, and so we're here to talk to them about that. And we hope that the Navy can start this process that one could imagine, for example, Navy wives giving birth in the water with the service dolphins that the Navy already has. One can imagine the service dolphins helping the returning veterans with their traumas and post-traumatic stress disorders and so on. And this could lead to a much more harmonious planet, which is consonant with the Navy goals right now, that they will pursue humanitarian efforts to avoid or reduce conflict before they will choose to attack and to do other things like that. So we're very proud that the Navy wants to do that, and we're hoping they'll continue, and we're here to help in any way to reverse this trend on the planet. Thanks.	Thank you for participating in the NEPA process.
Surfrider Foundation (Labedz) (Oral)	Hi, I'm Gordon LaBedz. I'm here representing The Surfrider Foundation, and you're taking notes. In 2006 the Surfrider Foundation, the Kauai Chapter, sued the Navy over RIMPAC. And the law that we used with NEPA, National Environmental Protection Act, and the judge agreed with us that RIMPAC needed an environmental impact statement. And the Navy appealed, and the appeal judge agreed with us, too. And our view towards this EIS is that this does not work. A blanket, We want to do whatever we want to do for the next five years as far as testing and training in one booklet, is just not in the spirit of the National Environmental Protection Act that each bad thing that the Navy does needs to be looked at separately. And a blanket umbrella EIS it appears to us is illegal. And that's the most important thing that needs to be commented on this draft EIS, and we are	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-3: Responses to Comments from Organizations (continued)

Commenter	Comment	Navy Response
	talking to our attorneys. Thank you.	activities. The EIS/OEIS is prepared by the Department of the Navy in compliance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality, the Department of the Navy procedures for implementing NEPA, and Executive Order 12114 (Environmental Effects Abroad of Major Department of Defense Actions). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, comments received via the EIS/OEIS public participation process, and the requirements of the Navy in order to fulfill its mission.
Surfrider Foundation (Sardez) (Written)	The weakest part of the document is the 'justification" for the NOAA Marine Fisheries "take" permit to harm and kill endangered marine mammals. There is simply no science whatsoever to justify the numbers. Killing endangered species, arguably, is one of the worst things the Navy does besides burning fuel and polluting the ocean and yet there is no justification, nor science for NOAA to make any educated decision. Years ago, the Navy would not hire consultants and did whatever they want. Now they hire consultants and continue the same destructive behavior without mitigations.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4 contains comments from private individuals received during the public comment period and the Navy's response. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered with the exception that expletives, addresses, and phone numbers have been removed, as necessary.

Table E.3-4: Responses to Comments from Private Individuals

Commenter	Comment	Navy Response
Anonymous (Hilo-Written)	Remove outline around the monument as the way it is currently represented it appears that the Navy does not conduct training activities within that area which is not true.	Thank you for your comment. The Navy agrees that this outline has created confusion. The figures depicting the Study Area have been revised in the Final EIS/OEIS to remove this outline. One exception is Figure 6.1-2, in which the point of the figure is to identify the monument.
Anonymous (Hilo-Written)	There have been consistent and significant long-term studies which show conclusive evidence that acoustic disturbances result in brain hemmrage, internal injury, breaking of resonance chambers, rapid ascent from dives, etc. in many critically endangered cetaceans. From speaking with officials tonight, my only impression of the EIS is its impossible to quantify the real impact in these pelagic species despite the fact the Navy "isn't seeing many problems." Although these trainings serve a benefit to National Defense their location, timing, and true impact must be more closely examined.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Abrahams (Electronic)	Dear Dept. Of the Navy, I am writing to ask you to please not use high frequency sonar in our oceans. The damage it does to marine animals is horribly inhumane. While I do understand the need to test, continuing with the high frequency soar testing makes our nation to bad to the rest of the world. We need to find a more humane way to do testing. Thank you, Leslie Abrahams	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Actipis (Electronic)	I'm extremely concerned about the impact this might have on sea creatures. I think we can protect national security AND endangered marine animals. Please consider the steps recommended by the Humane Society of the US and other groups: * avoiding the most harmful activities in areas used as calving grounds or migratory corridors * avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; * using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Adams (Electronic)	Please protect all of the marine mammals from explosives and sonar along the East Coast» and California/Hawaii».	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Agnello (Electronic)	I am completely against this useless display of disregard to wildlife. I think you can see how many people are against it, so please go back to square one and think of another way to do this without harming innocent creatures. Please,please, please don't do this – these creatures can't speak for themselves!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Ahern (Electronic)	Please reconsider your plans for training exercises that will harm, maim or kill dolphins, whales and other marine life off the coasts of California and Hawaii.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		a decade.
Akaka (Oral-Hilo)	That's fine. 'Ano 'ai ke aloha. My name is Moanikeala Akaka. I'm with the Aloha Aina Education Center. I really didn't have any prepared statement. However, over 20 years ago, the first suit that was done related to the sonar and the whales came from Hilo, came from this island, and so this has been going on for a number of years, maybe 15, 20 years. And, you know, I see that we keep going 'round and 'round about this whole issue related to, you know, the sonar. You know, it's not just the fact that it's not known the kind of damage that the sonar can do to our mammals and our sea life and the whales, the turtles, the dolphins. You have beachings that have happened, that have happened in areas where there has been sonar trials going on, and there is a great deal of concern. You know, these creatures have inhabited these oceans for millions of years, and yet we end up intruding on their territory, and with the sonar you end up hurting them. There's a situation where whales, when they're in the vicinity, they end up going up fast and end up getting the bends. There's a great deal of concern, but the U.S. Navy doesn't seem to be concerned about these creatures that there aren't very many of them left. There are only, you know, two countries in the world that -- you know, and that is shameful -- that even hunt whales. You know, there's a great deal of concern about the more and more military industrial complex that's evolving in our islands. You know, bad enough that we have areas left over from the Second World War, say in Waikoloa, where they say it will take -- at $10 million a year, it will take 60 years to remove the munitions that they have left over at Waikoloa. It will take 60 years at $10 million a year to remove these munitions. We have over in Oahu, even off this coastline, munitions that have been dumped since the Second World War. You know, the U.S. Military seems to have no regard for the trash, the lethal, toxic trash. Even on our shores we have munitions that float up on one of our only white sand beaches, Hapuna Beach, and, you know, there seems to be no concern. Over in Waianae, you have debris, military debris that's still there, leaking probably, leaking into the ocean, getting into the fish life, and then we eat the fish. You know, it's -- you know, we're sick and tired of being the dumping ground for America's military industrial complex. They don't want you in Japan. They don't want you in Guam. In Okinawa they say the Osprey helicopters are too dangerous. You know, the U.S. Military -- whether it be the Navy, the Army, or the Marines, keep dumping on these islands. And we're sick and tired of this kind of abuse. Mahalo.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Alalem (Oral-Kauai)	Aloha, my name is James Alalem. Under the International Laws of Occupation, more particularly Article 43 of the 1907 Hague Convention, The occupying government must establish a system of direct administration of the laws of the country that it's occupying. In other words, the United States government is an illegally occupying government in the Hawaiian Islands since its unprovoked intrusions by the troops on August 13, 1898, was mandated to administer the Hawaiian Kingdom Law over the territory and not its own until they withdraw. This is not a mere descriptive assumption by the occupying	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	government, but rather it's the law of occupation. Under the International Laws of Occupation a title of sovereignty of occupied territory does not pass to the occupying powers. And if that occupying territory to be a neutral, the occupying powers is limited by the laws of war. In other words, we are military occupied from 1893. It was never solved. So with that I leave it to you guys to know that we want back our country that you guys stole from us. Thank you.	
Alalem (Written-Kauai)	U.S. violates international law. You should be ashamed of yourself. Ignoring the Kingdom of Hawaii. The people and culture you help destroy! What more do you want? You don't need to put on a show, do you think we are that dumb and stupid? Hawaiian Kingdom is military occupation. You going to do what you want anyway.	Thank you for participating in the NEPA process.
Albertini (Oral-Hilo)	This is a fraud. The greatest invasive species that I know of in Hawaii is the United States military. MS. AKAKA: Hear, hear. MR. ALBERTINI: And the history of Hawaii was the U.S. Navy was directly involved in the overthrow of Hawaii in 1893 on behalf of corporate interest, which was sugar then. And today the U.S. Navy and its Navy SEALs and special operations teams are involved on behalf of corporate interest today, overthrowing governments all around the world on behalf of oil interests and others. So the whole idea of the U.S. Navy protecting the environment is a fraud just like the whole sense of defending democracy, freedom and democracy. It's a fraud. And it's time we really take you to account on this kind of thing. You're the greatest polluter on the face of the Earth, the U.S. Military, and in Hawaii that's the case. Pearl Harbor alone, what is it? Seven hundred and some odd sites are polluted sites in Pearl Harbor. It used to be the fish-breeding capital of the world. Today it's a polluted cesspool from the U.S. Military, including nuclear waste from the submarines at Pearl Harbor. The Navy Sea Systems Command used to put out the data, and I remember doing the research. There were five million gallons discharged as of 1973, and when we started publicizing that, they started withholding the data. The U.S. Navy continues to bomb at Pohakuloa along with all the other military branches, and it's a contaminated area with depleted uranium and other things up there. So stop the fraud on us. Stop dividing the community by this type of thing, and I would say I agree with the Grim Reaper. It's time for the Navy to go. AUDIENCE MEMBER: Time for the Navy to go. AUDIENCE MEMBER: Thank you, Jim Albertini.	Thank you for participating in the NEPA process.
Allen-01 (Electronic)	I just want to comment, without bias, but a clear and present sense of urgency, that the sounding tests that will be carried out to better map the seafloor and subterranean channels, will most likely and at a high degree of probability, be in the same locations, where many of the high order mammals will be hunting and eating, spawning, etcetera. My hope is that the US Naval operations, especially the pacific and southern California fleet will form a partnership with independent, unbiased sources, regarding the survival, of an already heavily impacted irradiated undersea environment, logic should prevail, the link to the story below cites the effects of new high pulse sounding gear and the dolphin	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	deaths speak for themselves.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Allen-02	Timing is everything, let us not ignore the extreme stress that the entire ocean food chain is under right now, the events at fukushima have yet to be measured in such a wide scale, but I think further stressing an already battered food chain, is going to be the nail in the coffin, so to speak, for the majority of sensitive mammals. If not killing them, it will destroy their sense of direction, I urge the highest caution in this matter, if we start to see dolphins washing ashore in California right after the sounding tests, we will know who to point the finger at, just like in Peru. I only hope for the highest transparency and for the Navy to bring in the consultation of unbiased marine protection agencies to assess ways in which the Navy can have the least environmental impact. Thank you, sincerely Nathan Allen http://inhabitat.com/615-dead-dolphins-discovered-on-peruvian-coast-oil-exploration-thought-to-be-responsible/615-dead-dolphins-found-along-peruvian-coast-ocra-peru-2/	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 of the EIS/OEIS.
Almy (Electronic)	Dear Sir or Madam: I write out of concern about the effects of SONAR on marine mammals. Please avoid causing death or interfering with these animals' biologically important behaviors by changing the timing and/or location of these activities. By avoiding areas of high use and high importance to these animals, and by employing technologies such as acoustic monitoring to detect marine mammals' presence, the Navy could proceed with its operations without causing undue harm to these species. Sincerely yours, Jessica Almy	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Alward (Electronic)	It saddens me beyond belief to think of how horrific a death the sea mammals must endure under the sonar and explosive noise. Please minimize the collateral damage to these vulnerable creatures. No sea creatures, no seas, and without seas, we will no longer survive. This is the first generation of people who can legitimately worry if their children's children will have a future on this planet.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ames-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ames-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Amornkul-01 (Electronic)	Dear US Navy, As a former Hawaii resident, I have seen what happens with well-intentioned military testing off pristine coastal shores in Kauai and Kahoolawe. I grew up in Maryland, and I now live in California. As a Buddhist physician who has worked and lived all over the world doing International HIV prevention in Africa and polio eradication in Nepal/India, I plead that this proposal be reconsidered. All beings on this earth are inter-related, and if we damage/harm another, we hurt ourselves. Humans, with our highly evolved brains, have the responsibility of foresite and thinking through the global consequences (not just financial or political) and repercussions of our actions and	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	decisions.	
Amornkul-02	Please reconsider the initiative. Please consider E-139dditional steps to reduce the harmful impact to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please re-think the plans and incorporate additional protective measures to preserve the marine biodiversity – particularly in Hawaii where 80% of the US's endemic biodiversity is found. Thank you for your consideration. P.N. Amornkul, MD, MPH	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
D. Anderson (Oral-Oahu)	My name is Diane Anderson. Do you want my address? I live on the North Shore of Oahu, and I arrived here today with my mind pretty much already set up with really, really concerns about where our species, our human species is going to draw the line to impact the marine world, mammals in particular. And I just find that it just seems in our world escalating and escalating and escalating, and I believe our human species can do better, much better. So I do not support active -- when I read the numbers of the impact that the Navy is predicting, I am horrified, just horrified. That's not very much to say, except for that I'm here in person to say it. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Anderson (Written)	I think the public would welcome a situation in which truly independent observers could be placed upon the Navy ships during the most critical times. They would not be government employees or scientists on the Navy payroll. They would be highly qualified experts from independent university marine programs and from credible environmental organizations. The arguments I have heard against this are need for security clearances and lack of bunk space or various inconveniences. However I think this is doable if the Navy would agree to it.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities. Please see Section 5.3.4.1.15 (Conducting Visual Observations Using Third-Party Observers) for a complete discussion of the viability of independent observers.
Anderson-Pomeroy (Electronic)	I live in the San Juan islands off the coast of Washington state. The lives of Orcas, Minkes, Gray and Humpback whales are intertwined with the lives of the islanders economically, educationally, and spiritually. As a proud daughter of a retired Navy Chief, I understand and respect the Navy's need to conduct various exercices to protect our country. But I also have the utmost confidence in the Navy's ability to develop technologies that protect the marine life that our citizens depend on. Those that serve show everyday their excellent capabilities to take the long view, to do what's right especially if it is difficult. The exercises currently conducted by the Navy cause horrible pain and suffering in intelligent species. The death of L112, the female Orca, was definitely caused by those exercises. I know the Navy does not want to harm these creatures intentionally. Please show those whom you serve and protect that you intend to work toward a humane solution. Thank you.	Thank you for participating in the NEPA process.
Anthony-01 (Electronic)	I would like to comment on the testing that will completely change the course of mother nature and this earth. We are inseparably tied to every animal in the ocean. We need them thriving and healthy with how much we already do to hurt them. As the Navy please do the admiral thing and stop any testing that will hurt our fellow mammals. It is not worth it in The end. Who knows if the funding for your testing will even be worth the consequence in the future. Do not mess with life!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Anthony-02 (Electronic)	Read below	Thank you for participating in the NEPA process.
Archibald (Electronic)	Stop the killing of 1,800 whales and dolphins and the deafening of 15,900 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the California and Atlantic Coasts, and the Gulf of Mexico.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Argentierti (Electronic)	To Whom it may concern, There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Please consider the voice of the public..we wish to support all that you do. We appreciate your dedication to our safety. Most sincerely, Lynne Argentieri	to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Arias (Electronic)	Please consider that there is no rewind button on your testing equipment -- once the damage is done, there is no going back. If you seriously want to develop these weapons in order to protect the people of this country and its allies, then you might want to think about what it means for our children and their children to live in a world damaged beyond repair by people with all the right intentions but none of the real courage to protect all of its creatures. Please do the right thing -- even though it won't make billions of dollars for some companies who invest their money but none of their own lives...	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Arita (Electronic)	The U.S. Navy is completely inconsiderate and asinine. They should know that we have already had several important sea animals die from the oil spill and more etc. Now they wanna do super explosions with what little life is even [expletive deleted] left in the ocean? I hate our army. I hate the people who don't give a damn about any other living creatures we SHARE this planet with. If I was in charge, i'd make my own prison to put idiots like that, away for life. This is another reason why i hate the american army. Got damn rednecks controlling everything, little rich kids don't know [expletive deleted].	The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 of the EIS/OEIS. Thank you for participating in the NEPA process.
Arkin (Electronic)	Please consider protecting. ALL living creatures, not just the human race. Please do not conduct these tests as the cost to sealife is too high. We are all God's creatures.	Thank you for participating in the NEPA process.
Armao (Electronic)	if navy sonar is harming dolphins whales and other marine mammals then someone is not doing their job. it is not good enough to develop sonar that detects enemies if you are then killing life in the oceans. this is a nightmare and sonar should not be tested and used if that is the end result. theses animals live in the seas it's not like they can go somewhere else. the navy and sonar developers must take responsibiliy for this. there will be nothing left to protect and keep safe if we extinguish life in the name of security. i for one would rather be less safe and keep the dolphins and whales around and healthy.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Arms (Electronic)	How can we call ourselves a civilized nation when we are killing animals- not for the needs of our people? This is completely irresponsible behavior of the government. Keeping the planet ALIVE should be the main goal.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Asam (Written)	Opposed	Thank you for participating in the NEPA process.
Ashkenazy (Oral-Kauai)	First, I'd like to thank you for being here. I'm really glad that you're visiting all the Hawaiian Islands to get public input, and I'm very happy to you know that you go to San Diego as well. But I don't think this is enough. I think that the entire Pacific Coast needs to be covered because people in California, Oregon, and Washington, they all need to give their input into this very urgent situation. And I'd also like to say that really an EIS wouldn't be necessary if it were not for this endless push of weapons testing, weapons production for endless wars. This is pure insanity. In fact, this is not for the defense of the country. This is for the benefit of the war contractors; Raytheon, General Electric, Lockheed Martin to name a few. This is so wrong. These people are making huge profits with war. Now, I remember, Commander, I saw you in the newspaper where Raikaohi (ph) was blessing you and telling everyone that a balance had to be struck between culture and the military. Well, let me tell you about the balance. I have a relative at Jeju Island in South Korea, and she is seeing the results of the testing of the Aegis missile that has gone on here. And I'm going to read you some of the things that she wrote me. She said, Well, the testing of the Aegis missile is resulting in an Aegis missile base forcibly shoved down the throats of the brave people of Jeju as if the U.S. Military doesn't already have enough bases in Korea. Remember, we have a thousands bases worldwide. Why do we need another base on this beautiful island? I mean, I find it amazing that the military always picks the most beautiful places to set up housekeeping. But anyway, as I said, it's about money and the rape of people to get it. Shame on anyone supporting PMRF which cannot possibly justify the jobs that it provides for the people of Kauai. The money which supports PMRF could provide so many more jobs, many more jobs for a peaceful economy such as education, health, environmental progress, alternative energy, housing, public welfare, and the list goes on. Shame,	Because of the footprint of the proposed activities, the Navy feels the public meeting locations are appropriate for this project. In addition to the meeting venues, the public can download and review the document, and make comments to it, on the website, which is available throughout the world.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	shame, shame.	
Atack-01 (Electronic)	How can you sleep at night knowing you're contributing to the death of our oceans? You do realize that no matter where on the planet you live, when the ocean dies, we all die.	Thank you for participating in the NEPA process.
Atack-02	In the year 2012 how can you think this is ok? How can you put at risk so many creatures of the ocean? Not only cetaceans will be affected by this, but you are going to disrupt the entire balance of the ocean! Our planet cannot exist on any level without our ocean. I beg you to stop this!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Atkins-01 (Electronic)	It is known that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. I ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please re-think plans and incorporate additional protective measures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Atkins	It is known that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. I ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Please re-think plans and incorporate additional protective measures.	practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Attwell (Electronic)	If you must do this kind of testing, please implement additional protective measures to minimize harm to our precious sea creatures. No amount of national defense is worth the harm, suffering, and destruction it causes to these creatures. Our own future depends on the health of our oceans. Protect our ocean life, and you protect us. This too must be part of the mission of the U.S. Navy.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Atwood (Electronic)	Navy: " Sonar, Blasts Way Harmful Than We Thought" "1.6K WHALES, DOLPHINS COULD FACE INJURY, HEARING LOSS IN YEAR (NEWSER) – The Navy's use of sonar and explosives could deal damage to some 1,600 marine mammals near California and Hawaii every year—a figure far higher than once believed. The whales and dolphins are at risk of hearing loss and other injuries, the AP reports. What's more, the explosives could accidentally kill up to 200 animals. An earlier study assessing the risk between 2009 and 2013 predicted that just 100 creatures could be hurt or killed. The new research is part of an environmental impact statement that considers the Navy's plans between 2014 and 2019." You know it's not only harmful, but deadly. This quote was from the US Navy, posted 5/11/12. So, why would you continue to do this? Are you here to protect lives or destroy them? I am a constituent, and a tax paying US citizen, and I do NOT want my hard earned tax $ going to the destruction of such precious species. Thank you for your consideration to protect, rather than harm and destroy. Sincerely, Shelly Atwood, MD	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Augustine (Electronic)	As a citizen of the United States I strongly, strongly object to the Navy's plan to conduct high-intensity sonar testing anywhere near marine mammals. I do not want you to protect me at the expense of killing wildlife that we are all responsible for and which I cherish. Such testing has been documented in the past to cause significant loss of marine life and cause thousands others to become deaf. The environmental impacts of your actions are simply too great. Please stop and desist.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Aum (Electronic)	I hereby state my objection to any sonar testing that would damage whales, dolphins or any other sea creature sensitive to such testing. Please DO NOT DO THIS!!! Is there another way to test without harming the environment and the sea life? Is there another location? Please listen to the collective voice of the conscience, of the public, our future and common sense of not destroying species that could become endangered. Thank you	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Austin (Electronic)	It is my understanding that the sound tests the Navy is considering can be very harmful to marine animals. The Navy is full of so many smart and innovative people my hope is that there is another way to conduct research and development. I know sacrifices must sometimes be made for security, but I fear this action is premature since there should be other alternatives available. Thank you for considering my comment. Karina Austin	Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Avery (Electronic)	Please stop killing off whales. This world is rough enough and we need them, the oceans need them. Find a better way!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Avila (Electronic)	As a resident of Hawaii, I can think of no greater responsibility than to be stewards of our great life giving ocean. I must plead with the Government and Naval forces: PLEASE! For the sake of ALL sea creatures, reconsider and change the plans you have for testing in our oceans; in Hawaiian and Californian Pacific waters and Atlantic waters as well.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		a decade.
P. Avila	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Paula	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ayers-bell (Electronic)	This is in regard to the Navy plans to do practice in the oceans near California and Hawaii using live explosives and high intensity sonar, that will cause extensive and potentially harmful and possibly deadly effects on marine life in those areas. I understand the need for practice, but there must be some way to eliminate or reduce the amount of damage to the unsuspecting wildlife, to make dry runs or some other option. Please reconsider the damage to the already compromised creatures of the oceans. Thank you!	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 of the EIS/OEIS.
Backinoff (Written)	I am very concerned about the impact of sound and weapon testing on marine mammals and other sea life as well as humans. In the research I have done, I have seen documentation that some of the experts that claim that whales and dolphins are safe in relation to sonar testing are working under government grants in so they are biased by their funding sources. I am strongly for decreasing military expenditures and reallocating those funds to programs that will improve conditions for peaceful communication. Most people just want a safe home with food to eat and that is much less expensive then high tech weaponry and protective equipment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding bias in the Navy's analysis, in conducting the analysis of impacts to marine mammals, the Navy uses hundreds of peer-reviewed scientific research studies.
Baker (Electronic)	This project, that will adversely affect the hearing of whales and dolphins, is unconscionable. Please think of another way to accomplish what you want to do to map the seas. There is no need to sacrifice precious marine life. Your present plans are not acceptable. Please reconsider the consequences of your actions now before it's too late. Thank you!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Balagan (Written)	Opposed	Thank you for participating in the NEPA process.
Baldwin (Electronic)	We are the most powerful nation in the world. We should be able to run tests in a manner that does NOT harm marine life...you need to find another way to do this. It's not ok...and our military has more compassion than that!!!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Ballou (Electronic)	Please balance all needs when making your decisions. Marine Life can not comment.	Thank you for participating in the NEPA process.
Bambrough (Electronic)	Please don't proceed with the testing that will injure whales and dolphins! They don't have voices to speak out against this kind of testing....so i pray that my voice might help make a difference for their survival. Marine mammals are amazing and endangered too much already. Please consider the welfare of all animals and choose another way that won't cause marine mammals their lives. Sincerely, stephanie bambrough	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Baratta (Electronic)	Dear Navy Staff, I recently became aware of your plans for sonar exercises on both the east and west coasts that will have significant negative health impacts on marine mammals. I implore you to reconsider these plans and avoid the most harmful activities in marine areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I am well aware that Navy leadership has taken forward-thinking steps to reduce military impact on the atmosphere and increase energy security and I hope you will consider aggressive protection steps in minimizing harm to marine mammal populations, some of which are endangered. Thank you very much for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Barker (Electronic)	Dear sirs, Thank you for providing this method to comment on the underwater sonar program. I support the United States military and the United States Navy as the daughter of a former Air Force enlistee, a friend to several enlisted men and officers in various branches of the service, and a resident of a Coast Guard town. I have volunteered for various causes that support our military and their families. I support having a ready military that is well trained. All this said, I oppose the sonar program as there are still scientists and environmentalists who argue that sonar can disrupt whale feeding	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	patterns, and in extreme cases can kill whales by causing them to beach themselves. I understands that scientists don't fully understand how sonar affects whales, but implore you to consider delaying this program while more scientific study is conducted. While you will encounter many individuals and comments that are inflammatory, reason and unbiased scientific study are the only true methods to discerning the correct path. Respectfully yours, Katie Barker	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Barlow (Electronic)	Whales are some of the oldest, most intelligent creatures alive on earth. Only about a century ago, they were hunted nearly to extinction, and many populations are just now making a comeback while other populations struggle to do so. However, just as these whale populations are beginning to recover from the previous harm caused by humans, the Navy threatens to harm or kill thousands more through their sound testing. Whales us sound for navigation, communication, feeding, and for the selection of a mate. The frequency and intensity of the sound deployed by the Navy deafens the whales. Without the use of sound, whales are unable to survive, and a deaf whale is a dead whale. Whales are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. I have personally seen the pain and suffering that whales are capable of experiencing through encounters I have had with humpback whales entangled in nets. The Navy is fully aware of the harm and damage that they will be causing. They have calculated the estimated number of deaths, and I know the amount of suffering that the whales will endure. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Sincerely, Dawn Barlow	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
S. Barlow (Electronic)	To the Navy officials: I am writing to express my strong opposition to the Navy's acoustic/sonor testing in Hawaii and California along the migration routes of dolphins and whales. I understand that these tests are killing or gravely injuring these whales and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	dolphins. I recognize that testing is necessary for our national security and I'm glad you are doing that. But surely you can find places to do the testing in areas that do not damage these creatures. I would appreciate a response. regards, Sean Barlow, Brooklyn, New York	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Barnard (Electronic)	Dear Navy Officials: I definitely think we should protect our country and I thank you very much for that. Every American is proud of our Navy and we all appreciate the fact that you keep us safe. I also know you are smart enough to find a way to protect our country without killing and/or endangering our whales and other marine life off the coast of California. Marine life is one of this country's greatest natural resources. Please be considerate and protect these animals while you're protecting Americans. Sincerely, Sue Ellen Barnard, DVM Franklin, Tennessee	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Barnum (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I strongly disapprove of Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Barry (Electronic)	You live in a beautiful place - why practice war there? The sea creatures have been there far longer than we have and deserve our respect. Please stop killing them!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Barton (Electronic)	I am deeply concerned over the sonar testing proposed off the east coast. The cost to marine mammals resulting from such testing is unthinkable, especially since there are other alternatives which would avoid this catastrophic massacre and permanent impairment to such a large number fellow inhabitants - all feeling, thinking creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	This is unbearable. Don't let this happen, please!	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Basmajian (Electronic)	Dear Sir or Madam, Please do not allow sound testing that will harm the whales as they migrate! We must think of the consequences of our actions. Thank you! Don Basmajian	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bates (Electronic)	This is one of the most unnecessary and barbaric excercizes!! You have been doing this for years now... you KNOW what it does! You also know the results of your actions, obviously with you estimate of the Dolphin mass murder. PLEASE STOP THIS NOW!!! It	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	is almost as ignorant as the people who round up dolphins so young men can "become Men" right of passage by slaughtering rounded up and captive dolphins!! What is it with you men that you feel the need to slaugher something in order to feel powerful? I find this sooo sad and heartbreaking for you all! Why are you perpetuating this to our younger generations? Let it stop w2ith You guys here and now!! Please this only adds more violence and damage to every living thing/person/soul on this planet!! We have done this for centuries! Maybe we should try something different for a change?! Help the Earth and all beings, things, souls to evolve beyond Murder, Mayhem and Fear! Especially when you already KNOW what it is going to do!!! PLEASE DO NOT DO THIS! Hawaii is a very Sacred place, PLEASE treat it with respect, Love and Consciousness!!	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bator (Written)	Aloha! The U.S. Navy is just going through the 'process' of the National Environmental Policy Act of 1969. I understand that my comments in this final Environmental Impact Statement/Overseas Environmental Impact Statement will not have any affect on the purpose of the U.S. Navy to implement the Hawaii-Southern California Training and Testing EIS/OEIS Project. However, I will make an effort to endeavor: The environmental effects associated with the HSTT EIS/OEIS Project will be insurmountable. The use of active sonar and explosives under the Pacific Ocean will have extremely harmful effects on the wildlife. It is 2012, simulated military training is possible, to accomplish the U.S. navy's mission to maintain, train, and equip combat-ready U.S. naval forces capable of deterring aggression and maintain freedom of the seas without destroying the sea life.	Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Baugh (Electronic)	Why do some humans think the human race is separate from nature and therefore superior to it? We will thrive and survive when we learn to live together without harm to any life. Please reconsider the plans to do the testing that surely will affect the sea life. Thank you for attention.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Baxter (Electronic)	I think it is sad that you will be testing in the waters off of California and Hawaii and potentially killing and causing hearing loss to so many marine animals. I am truly opposed and hope that this testing will be stopped.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Beard (Electronic)	Please stop the naval testing that will hurt marine life, specifically marine mammals such as whales and dolphins. The ocean noise is very harmful to the ecosystem, especially for marine mammals who use sonics to hunt, comunicate, and mate. Thank you. Sincerely, Sky	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Benjamin (Electronic)	I am conservative American and support our Arned Forces and those that galantly serve in each of our armed forces, especially the Navy. Protecting our nation and our troops is essential and vigilance is mandatory. However, I believe it is our responsibility to do all we can to avoid unncessary and avoidable damage to wildlife and our surroundings in	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the natural order of life, we need to do everything we can to protect animals and our fellow humans while not sacrificing the above. In upcoming military naval excersises in our oceans, especially those involving sonar and explosives, we MUST take prudent steps to avoid damaging and/or killing marine mammals like whales and porpoises. Using technology at our fingertips we need to avoid populated marine areas in testing and di everything we can to protect these helpless animals who become unnecessary collateral damage. Sonar must be used with consideration for the best outcomes for the planet and for our future. Please take immediate steps to avoid the deafening of thousands of whales and other collateral damage that can be avoided. It is our charge and responsibility as Americans. Thank you.	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Benke (Electronic)	Please protect marine mammals from explosives and sonar along the East Coast and California/Hawaii. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding the 2003 Washington State stranding event referred to in the comment, although mid-frequency active sonar was used by the Navy, the distribution of harbor porpoise strandings by location and with respect to time surrounding the event do not support the suggestion that mid-frequency active sonar was a cause of harbor porpoise strandings. Rather, a lack of evidence of any acoustic trauma within the harbor porpoises, and the identification of probable causes of stranding or death in several animals, supports the conclusion that harbor porpoise strandings were unrelated to Navy sonar activities. Regarding the 2005 North Carolina stranding event, NMFS was unable to determine any causative role that sonar may have played in the stranding event. All of the species involved in this stranding event

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		are known to occasionally strand in this region. Although the cause of the stranding could not be determined, several whales had preexisting conditions that could have contributed to the stranding. Cause of death for many of the whales was likely due to the physiological stresses associated with being stranded. A consistent suite of injuries across species, which was consistent with prior strandings where sonar exposure is expected to be a causative mechanism, was not observed. For a complete analysis of these and other stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bennett (Electronic)	Stop. Think. Killing marine life to test weapons? The Navy's job is to protect America, not kill it's animals. Many if not most Americans love, enjoy and would want to protect our animals as well as out citizens. If we are murdering animals to test weapons we are ignorant useless dwellers on this planet. Destruction is not protecting. This world belongs to every animal and human on it. America belongs to every citizen in it. I would hate to read that the US Navy disgraced our country by murdering marine mammals just to test some weapon. We are better than that.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Benzel (Electronic)	I am very much against the use of explosives and high intensity sonar when it harms whales, dolphins and other sea creatures, killing many of them. I'm all for security but "training exercises" can certainly be done without creating a war on wildlife. I am also ashamed that my tax dollars are funding this sort of thing, which we know has done terrible harm and death to sea creatures over the years. The price is too high in my opinion.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Berberich (Electronic)	I spoke with many people at the meeting and after doing so I just don't feel explosive testing is necessary. Computer simulation can be just as realistic and is unharmful. Don't brush it off and say it's not as realistic. Technology is fantastic and can absolutly make it as realisitic as the real thing. Also that way the rest of the human population won't hate the Navy and be constantly fighting them.	Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, today's simulation technology does not permit effective training and testing.
S. Berg (Electronic)	Please DO NOT carry on with the proposed Naval Training and Testing EIS/OEIS that will inevitably kill and maim marine wildlife!!! It is incredibly baffling that all of our military training exercises have to include torturing and killing mammals on land and in the sea and I find it repugnant, unnecessary and evil. Our nation has become one that does not respect the sanctity of life -- whether animal or human -- and I am always thoroughly DUSGUSTED to hear about activities that promote this violence. STOP, STOP, STOP these sick and twisted projected procedures! Thank you.	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
M. Berg (Electronic)	I understand the need for the Navy. However , we, as the human race have a responsibility to protect and keep our planets marine mammals safe from harm, and we should most certainly not should not bring them death. I believe as human beings we are intelligent enough to conduct tests without harming these amazing animals. I also believe that those in charge of this project will be humane enough to find another way. Swim with these amazing creatures. They will share a feeling of peace with you that render you unable to even consider harming them or their environment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Betourne-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements.	As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
Betourne-02 (Electronic)	The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The increase in harassment levels is due to several contributing factors that make it inappropriate to compare takes from the 2008 SOCAL EIS/OEIS: • An increase in training and testing activities and the inclusion of more activities and sources, such as pierside sonar testing, to meet emerging requirements • The 2008 EIS/OEIS included very little of the existing testing that is now included in this EIS/OEIS, much of which was covered under other environmental analyses. • This EIS/OEIS now includes a number of previously unanalyzed sound sources

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		• Combined geographical areas (inclusion of both SOCAL and Silver Strand Training Complexes, and areas not previously analyzed such as San Diego Bay) • Included activities conducted along a transit corridor between SOCAL and Hawaii that account for additional potential harassments • Updated marine mammal density information that reflects current species abundance • New acoustic effects model that provides a more accurate prediction of animal movement and therefore, potential exposures • New acoustic threshold criteria based on the best available science that is more protective of marine mammals, extends the ranges to effects of sound sources, and results in higher numbers of predicted level A takes.
Betourne-03 (Electronic)	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries.	As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Betourne-04 (Electronic)	I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Bettwy (Electronic)	Dear Sir/Madame representing the U.S. Navy: Please consider steps to reduce the harmful impacts to marine mammals in your testing methods. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please re-think the current plans for testing and incorporate additional protective measures. Surely the Navy can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Thank you, Dana Bettwy Irvine,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	California	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bhatt (Electronic)	This is making me sick to my stomach. Dolphins and whales are such intelligent and gentle creatures known for saving human beings on multiple occasions. Please please please please please do not put them through this torture. There is no explanation that can make this okay. We (The United States of America) are better than this. Thank you for your time.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bianco Johnston (Electronic)	DO NOT HARM MARINE LIFE	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Bickel (Electronic)	I am emailing you as a very concerned citizen of the united States. I would like to please ask you to refrain from planned sonar and explosive testing that the Navy is planning to proceed with. This is such a huge danger to the oceans mammals and survivial of multiple types of endangered species. We must protect our oceans and these animals, to sustain our earth for the future of our own children and our planets survival. Please reconsider executing your plans. Sincerely Jenni Bickel	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bielby (Electronic)	I am deeply concerned for our ocean sea life with the Navy's proposal with their testing which will deafen 1600 cetaceans and kill 200 marine mammals. If we continue to destroy our oceans in the name of protecting us who are we actually protecting ? THINK PEACE	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Blackorby (Electronic)	This is unthinkable and unforgivable. There must be a better way. PLEASE don't do this to our precious ocean friends.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Bleiweiss-01 (Electronic)	Please, please, for the mercy of the living creatures who reside in the ocean STOP THE UNDERWATER SONAR/SOUND TESTING. The US military is without question, the strongest, most advanced military on our great blue planet. It is now time for our great military to make its future technical advances in humane ways. As a future resident of Hawaii, I speak out for the whales and dolphins who cannot be heard but who CAN HEAR YOU. They are suffering greatly from the effects of underwater sonar. Dolphins	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and whales use sonar not only to navigate, but to communicate with each other. Our sonar testing, much louder than their own voices, drowns out their own calls, destroys their hearing, and can lead to loss of life. Please, please be conscious of how sonar testing affects them and cease this practice.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bleiweiss-02	We can use our technical prowess to create lab environments to test our equipment. Thank you sincerely for your consideration.	Sonar is the best means of locating small objects in the water at present. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Bleiweiss-03	Can you imagine the incredible headache sonar testing must cause to whales and dolphins? It is on the magnitude of TORTURE to these magnificent creatures. PLEASE STOP THE SONAR TESTING. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Blystone (Electronic)	Please do not test along the ocean waters and kill our marine lives. That is invasion on their home and they deserve to love a long healthy life without having to worry about what humans are going to do. We do enough to animals already without doing this test. You should test out in the DESERT!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Bohonik-01 (Electronic)	I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Please support the responsible sharing of our oceans for protection of our wildlife and our planet.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bohonik-02	Thank you for the opportunity to comment. Thank you, too, for the work you do to safeguard the USA as well as the shores of other countries, and the safe passage of vessels the world over. God bless your fine efforts.	Thank you for participating in the NEPA process.
Bolinger (Electronic)	Please stop killing our marine life while performing this testing! The public is outraged at this, as am I. Thank you	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Booker (Electronic)	Find another way. The cost is too high. The oceans and its abundant life are essential to the health of the whole planet.	Thank you for participating in the NEPA process.
Boros (Electronic)	I am writing to protest your sonar testing which will kill and injure countless marine animals. While I believe in taking steps to maintain our national security I know there must be alternative methods that don't harm the animals and sea life that live in the ocean. We must learn to share the planet with other living beings, not take everything for ourselves. Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bostock (Electronic)	STOP Killing OUR WHALES AND DOLPHINS!!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bourland (Electronic)	Please do not harm whales and dolphins with sonar. They are beautiful intelligent creatures who deserve our respect and our protection.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bowen (Electronic)	I question the value of ANY underwater explosives testing. I don't believe that the navy or the country is facing any submarine or surface vessel threats which would effectively be countered by in-water explosions. Certainly any need for such devices could be adequately served by existing WW 2 era technology and simulation training. I applaud, however, that the US Navy is submitting to this public scrutiny, which has been lacking in the case of high-impact echo-sounding by oil exploration firms. I would advocate an international assessment of ALL sonic pollution in the oceans.	Thank you for participating in the NEPA process.
Boyd (Written)	I feel showing dolphin playing near the ship during testing could establish a connection to us all. I dolphin show no effects at point blank range during full up testing nor do they run away. Please show more dolphin.	Thank you for participating in the NEPA process.
Boydstun (Electronic)	In conducting your training exercises along the California coast and Hawaii I urge you to minimize the impact these activities have upon the marine life. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Boyse (Electronic)	It is not acceptable to endanger marine mammals by conducting training exercises using explosives and sonar in their habitats.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bradish (Electronic)	Please, please stop thinking of ways to kill and instead, start thinking of ways to protect our planet, the human race, and all the other creatures we are so fortunate to share this beautiful world with. We humans have a responsibility to to protect and nurture all the other nonhuman persons, yes persons, like whales and dolphins (among others) who will be adversely affected by Naval testing stretching from Hawaii to California. The proposed testing is incredibly selfish and short sighted, actually unthinkable. How dare we?	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Bradley (Electronic)	please consider the damage to the cetaceans, dolphins and whales, with the sound experiments. This would be terrible to kill or damage these animals. Very bad planning. It is time to heal the planet not to add to the destruction. Thank you, Jean Bradley	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Bradshaw (Electronic)	please don't allow this.	Thank you for participating in the NEPA process.
Brandeis (Written)	My question to the Navy: Since the Navy conducts public outreach on all Hawaiian Islands and San Diego, then the Navy should conduct similar outreach on the entire Pacific Coast, from CA through Washington, to enable Americans affected by weapons development in the Pacific to give their input.	The decision on where to host public meetings is based on a variety of factors, including range of the Study Area and public interest in the project. Based on these factors, the Navy determined that meetings in Southern California and Hawaii were the most efficient and effective at providing and receiving relevant information from the public. Studies currently being conducted for activities in the Pacific Northwest do include public meetings in Washington, Oregon, and Northern California.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Braniff (Electronic)	We cannot further endanger the whale population for any reason. The level of intelligence of these giant mammals is unknown to us, but their future existence depends on the intelligence and compassion of human beings. Please do not create any situation that will harm their future. They need our help to survive. Thank you for listening, Martha E. Braniff	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Brenkman (Electronic)	My late stepfather, Paul Stevens, was a Naval Oceanographer, and he taught at the Naval Academy in Monterey, CA. He was extremely concerned about the impact of projects such as this, as he understood the balance of nature and the possible damage to creatures who would be affected by such research. I respectfully plead that you suspend all plans to implement these studies. It is my belief that this would be cruel and torturous treatment. I thank you for your consideration, on behalf of myself and my late stepfather.	Thank you for participating in the NEPA process.
Brewster (Electronic)	I think this is wrong and should not happen!	Thank you for participating in the NEPA process.
Brickell Vaughn (Electronic)	I am very concerned that a branch of the military of my country is seriously considering this kind of destructive, large scale testing. That so many intelligent, sensitive marine mammals would suffer incalculable suffering and loss strikes me as prohibitive. How can we be a proud people while conducting such reprehensible behavior? I fully understand that testing of various technologies needs to be done. Yet I see no reason this kind of data collection has to be done with such breathtaking disregard for our fellow living, breathing, feeling fellow creatures. As a nation, we have evolved in many ways. When we go to war, we now actually go to some great lengths to avoid "colateral damage". Civilian deaths are no longer seen as an acceptable & necessary by products of war. So too should we graduate to clearer thinking when it comes to creatures we share this planet with. Dolphins & Whales are not "just fish", they are our kindred. Not so very different from us, they think, they plan, they feel, they love, they live in family groups that support and care for one another. Are we so base a creature that this does not move us to seek out their protection? How can we think of ourselves as beings of conscience, yet allow ourselves to participate in a program that will blindly rip into our fellow creatures. Are we so blood thirstily self-centered? We certainly can devise testing protocols that insure the continued safety and well being of these animals, while allowing us to collect the information we need. Would our currently proposed testing have to be scaled back? Perhaps. Would our current plans need to be modified & revised? Certainly. Would it cost more money than we had anticipated? You bet. Would it be simple & easy? Not likely. But COULD it be done? Of that, there is no doubt! I want to look at myself in the mirror every morning and be able to stand tall. I want my Son to be proud of the things I have stood for. I imagine you do too. But I won't achieve these things if I stand by and	Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	say nothing while plans are made which would inflict grevious harm on innocent animals for no good reason. And to my way of thinking, being inconvienenced, having to go back to the drawing board to create a more humane plan, and being forced to become creative and come up with a new budgetary structure are not good enough reasons to allow ourselves to sidestep doing what is right and what is justifiable. Our current plans treat our companion creatures as if they were "things" with no feeling-that warrant no thought on our part. "Things" we can just discount. Nothing could be further from the truth. And if we don't start acknowledging this, we stain ourselves with filth. The filth that comes with the manically egocentric attitude that we can do whatever we want without regard to how it affects the planet's other "citizens". Personally, I would much rather try to grow & become "more" in my lifetime. The broader view, the bigger picture, the more inclusive approach is what leads us to become better human beings. And whatever that may cost-it is what we are called to do. Thank you for your time. Please think deeply about this. Sincerely Yours, Denise Brickell Vaughan	
Bridges (Electronic)	The price is too high. Please do not make this lethal mistake. I understand the need to protect our country but feel that innocent lives should not be taken to achieve this end. Please make me proud to support the Navy, as I always have been. PUT A STOP TO THESE PLANS!	Thank you for participating in the NEPA process.
Briglio (Electronic)	I want to say that the Navy (and everyone) MUST consider how it's actions affect the biological systems of other living creatures. The fact is that when one system is affected, it affects ALL systems, including humans. You cannot harm these intelligent mammals. You should be protecting them. There is always a way to compromise so that BOTH sides get what they need. Please don't hurt these amazing animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Brooks-01 (Electronic	I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Brooks-02	The animals have a right to live without the interference and interaction of human beings. Us, as people of the human race, wouldn't want this sonar testing to interfere with our lives.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
J. Brown (Electronic)	The U.S. Navy is proposing to conduct training exercises in the rich marine environment off the coast of California and Hawaii. I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures for marine wildlife. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please protect marine mammals from explosives and sonar in California and Hawaii by considering steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Brown-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Brown-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Kelly Brown-01 (Electronic)	Please don't destroy anymore marine wildlife using sonar testing. Too many animals have already perished.	Thank you for participating in the NEPA process.
R. Brown (Electronic)	All animals deserve to live on this planet and be safe from destruction of another species. Please do the right thing and make the necessary changes to protect whales and other sea animals. Thank you,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bruckner-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is

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Commenter	Comment	Navy Response
		only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bruckner-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.
Brudigam-seim-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Brudigam-seim-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4)

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Buckley (Electronic)	Please consider steps to reduce the harmful impacts of sonar on marine mammals such as avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	whales, dolphins, and porpoises might be harmed or killed. Thank you.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Bueler-Pina (Electronic)	Please consider these protective measures to help the protect our precious marine life. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Burley (Oral-Kauai)	Hi, my name is Stu Burley, and I live in Lawai Valley, and I am a resident of Kauai for 55 years now. When I came over I helped to open up the Pacific Missile Range Facility, and from there I started working as a civilian for PMRF, and finally after 46 years of being involved with every operation that took place, no matter what it was, I had a fantastic career. Now I'd like to speak a little bit about sonar. I remember when the underwater	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	range first operated in 1968. The oldest ship in the United States Navy was the first ship on the range, U.S.S. Fletcher. And it came on the range, and it put one little torpedo in the water, and underwater warfare started at that time. This EIS/OEIS, is a long time coming. It's great. It's something that should have happened some time ago. Now, when people ask about sonar, one thing, and I'd like to just identify the missile range here. First of all, there's a lot of submarines that do the work on the range. You will not hear a submarine sonar. They do not transmit mainly because in time of war if they transmitted they would be found immediately. And it takes surface ships, when they come on range, and they transmit, they are told at the pre-sail briefs that they should go into half power instead of full power because if they went full power, their sonar would ricochet off the island of Kauai or the island of Niihau. Therefore, the sonar signals that are in the water here are less than what you would hear in the open ocean. Now, for range safety, let me make a comment about range safety. PMRF is very environmentally, the word I want is conscious. I've seen it sometimes that if there's a helicopter in the area and it happens to spot a pod of whales, that is reported. The exercise stops and then moves to another location where that pod of whales no longer exists. They take care of the ocean. They take care of what's here around the island. They also give a lot of employment. Before I retired I took a poll of how many companies on Kauai actually get paid for doing something at PMRF, and the number came up with 270 companies. Thank you.	
Burley (Written)	Real-time training is very essential to all sailors in order to maintain their efficiency as a war fighter, a defender of our great nation, and the reason we have a free republic. Training in simulators is good but does not fill the warfighter experience at sea contingencies. The Navy has always been very environmentally conscious of endangered species. Range safety is always involved when training operations are scheduled.	Thank you for participating in the NEPA process.
Burns (Electronic)	As a shareholder I believe that the negative impact that the training and testing in the ocean around Hawaii and California during the next five years on animals defeats the purpose of having an EIS. According to your document the exercises could cause 1,600 marine mammals to suffer from hearing loss or other injury from its use of sonar and explosives each year for the next five years. The report also projects that 200 marine mammals will die each year. This is such a devastating and harmful impact to the marine life and an alternate on land testing facility should be utilized. There were millions of frogs used for biology dissection at one time but because of technology we now have better alternatives. Consider the IMPACTS in your EIS. You may not see the direct impact and the animals can not complain to you directly but is their pain, suffering and possibly death worth it?	See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts.
Butler (Electronic)	With all the research DARPA does, I sincerely believe that the Navy needs to work on a better solution than using sonar that damages more of our mammal marine life. It has taken 40 years for the humpback whale to make a comeback from near extinction to	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ONLY reach the designation of "endangered" species. There is research on the damage to dolphins and whales hearing and the disorientation leading to death and serious injury of mammal marine life due to the SONAR used by the Navy - in the U.S. and the U.K. Stranding, beachings, confusion and fear cause whales to stop feeding and subsequently die. The UK military has research from 2007 that clearly indicates there are issues with sonar in causing death to whales and that in 2011 additional research conducted by a team of international scientists has confirmed the earlier research. We have some of the best scientists in the world working on these issues and still, this issue continues to plague us in finding a better solution. The NAVY should re-evaluate it's plans, establish a timeline and a plan for alternatives, expedite research on better tools than SONAR, and start to more fully balance the military need in the context of damage to the ocean environment. It is unconscionable that the U.S. Navy would expand the damage to the marine environment by simplistically justifying it's actions by creating fear in the public. It requires leadership to take a more thorough and thoughtful approach. I respectfully submit, having been a public servant, that there are always alternatives that can be examined, and in this case, should be considered to mitigate the loss of marine mammal life.	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Butner-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Butner-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Butz (Electronic)	Dear Sir/Madam, I am writing in support of your careful consideration about proposed testing that may adversely impact migrating whales in the coastal waters. I am a concerned citizen, and simply want to register my request that you weigh the various needs for research and defense related activities along with a keen sense of stewardship in managing the larger environment and ecosystem that your activities may impact. Thank you for your consideration, Tom Butz, phD	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Byers (Electronic)	Please take all reasonable measures to ensure your impact on marine wildlife is minimized by exploring less dense areas and employing some of the recommendations provided by those concerned about the threats to whales and dolphins.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Caffrey (Electronic)	I am deeply concerned about the harm that most likely will be caused to marine mammals during the Navy's sonar training and testing. Please apply your environmental report findings, and avoid your sonar testing in areas where whales, porpoises and dolphins are especially vulnerable: in calving grounds, migratory corridors and seasonal-use feeding areas. Your military testing can go forth, and with a small amount of awareness and planning, thousands of marine mammals can continue to live in their natural habitat. Thank you for protecting part of our country's rich natural resources. We stand to learn much more about sonar from these amazing creatures when they are protected, and can share the coastline with us.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cagley-01 (Electronic)	Dear Officials, I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened.	(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cagley-02	What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to bring this to your attention. Sincerely, Jonah Cagley	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Callan (Electronic)	Please reconsider your use of warfare on mother nature. There are permanent catastrophic consequences to your actions and while you may feel it is necessary, consider that you may be wrong. Your actions will murder and permanently disable innocent members of this planet and while it is clear that that is of little importance to you, it is to many other people. I hope your conscious gets a hold of your decisions and you make the right one.	The Navy shares your concern for marine life. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 of the Draft EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.
Callis (Electronic)	Please adjust your training exercises to protect marine mammals from explosives and sonar.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Calton (Electronic)	I do not consent to have my tax money used for this. When SERVICE members say they SERVE...what does that mean? It means they SERVE US. I am a veteran and I approve this message.	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Camino (Electronic)	The estimates of the number of marine mammals that could be deafened and/or killed is unacceptable. Despite it being a worst-case estimate, the numbers are far higher than in the past, and I question the longterm benefit. We continue to destroy habitat and animal life and justify it as necessary for national defense, but at some point, the cost is too high. What will be left for those we've protected? I believe we've reached that point and ask that this testing be scaled back to reduce the negative impact on marine life as much as possible.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Capozzelli (Written)	I have read that the Navy is moving full speed ahead with plans for sonar and explosives training that threaten to deafen, injure, and even kill countless whales, dolphins and other marine mammals. Starting in 2014, the Navy will harass, injure, or kill marine mammals more than 33 million times in both the Atlantic and Pacific Oceans during five years of testing and training with sonar and explosives. Those alarming numbers come from the Navy itself. I am writing to ask your help because I am deeply concerned at the Navy's estimates of the far-reaching harm that will be inflicted on marine mammals during proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard, and the Gulf States from 2014 to 2019, as stated in your Draft Environmental Impact Statements. The sheer scope of the Navy's proposed training and testing activities is staggering, potentially assaulting entire populations of	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	marine wildlife off the East Coast, Southern California, Hawaii and the Gulf states. Navy ships will flood millions of square miles of ocean with high-intensity sonar, which is known to cause disorientation, hearing loss, stranding and death in whales. In addition, the Navy will be detonating high-powered explosives with the potential to fatally injure the lungs and other organs of marine mammals. The projected damage to whales and dolphins is staggering, with 33 million instances of "take" over five years, a vast increase over existing estimates of harm for the same regions. I am shocked by the level of carnage reflected in these numbers: over 5 million instances of temporary hearing loss; 16,000 instances of permanent hearing loss; almost 9,000 lung injuries; and over 1,800 deaths. The analysis fails to present and analyze reasonable alternatives that would significantly reduce the unprecedented level of harm to marine life. The mitigation scheme that the Navy principally relies upon, centered on the ability of lookouts to detect whales and dolphins, will not result in an appreciable decrease in marine mammal injuries. Federal courts have found this same scheme inadequate and ineffective for good reason: it is largely useless in conditions (common at sea) that impair visual surveillance, it is unsuitable for detecting cryptic and deep-diving species that spend little time at the surface and, even if it were fully effective at detecting whales and dolphins, would only protect species from the most serious injuries. The waters around Hawaii and Southern California, including critical habitat for endangered blue and humpback whales, would be among the hardest hit. The Navy predicts that more than 1,000 marine mammals would be killed in this area alone. And the threat to even one North Atlantic right whale may be one too many, as fewer than 400 of these survivors now hover on the brink of extinction. I urgently and respectfully call on the Navy to identify and set aside areas of high marine mammal density acknowledged to be the most effective means of reducing marine mammal injury. The Navy should and must take common sense precautions -- like keeping training out of key whale habitat -- before launching this sonic assault. Such precautions will not compromise the nation's military readiness. I urgently and respectfully ask the Navy to enact tough safeguards for marine mammals before it conducts the next five years of training exercises. If the Navy wishes to be seen as an effective steward of the ocean environment, it must take steps to significantly reduce the level of harm that training and testing activities will inflict on marine life. Thank you for the opportunity to comment and for your help on behalf of marine life.	As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carberry-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine	. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carberry-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006)

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		accessible on the NMFS Office of Protected Resources website.
Carchesio (Electronic)	Please consider steps to reduce the harmful impacts of these exercises to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
A. Cardenas-01 (Electronic)	PLEASE. If it is possible to attain your goals without the negative impact on live creatures - Why wouldn't you do it? We all have to share this earth. Animals are our gifts and our responsibility. We must behave humanely if we are ever going to evolve as human beings. Please, Deborah Cardenas	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
A. Cardenas-02	we see..and we base our life in the sense of sight. they hear..and base their life on the sense of hearing. Imagine if there was no light to see because someone decided to test the velocity of light through air..only to gain more knowledge and be more prepared to win a war..Please stop this, as you will harm every single living being that depends on hearing to survive, which are most of the animals in the ocean.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
M. Cardenas (Electronic)	I am appalled over the decision to use both sonar and explosives inside our precious oceans. The ocean is sacred and home to a life as vibrant and necessary as the dry land we live on. I am sickened over the idea of pollution and death being forced upon these innocent creatures and precious waters. The ocean is not our playground; it is not our property to abuse or mistreat. It is a home and a cooling center for the earth. These exercises are extremely selfish. I am demanding you find another way to train. For hundreds of years people walked on this earth thinking only of themselves. As a result poisons were pumped into the air, land and yes oceans. In our present life we cannot afford to be so ignorant and unenlightened. We have to put the concerns and welfare of ALL elements - people, animals, natural resources - to the forefront in any decision. American is not ignorant. We know better. Do not show a lack of compassion or disregard for this beautiful planet and the gifts our oceans bring to us every single day. Do NOT.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carey (Electronic)	I ask for use of explosives in the ocean to be stopped in order to protect dolphins, whales and other creatures from being injured or killed.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
R. Carley (Oral-Hilo)	Aloha. My name is Ru, and I live in Honaunau, West Hawaii. I come here as a voice for those who cannot be here tonight, and that includes thousands of people who live in and near Kailua-Kona, Captain Cook, Kealakekua, Honaunau, and Hawaii. I come as a voice for the creatures in the ocean who cannot defend themselves against this plan. I tried to read the Draft EIS, but how does one go through 838 pages in two days? My understanding of the draft means that the Navy wishes to step up testing on land and in the sea around our islands and off the coast of Southern California. I am not alone when I say no to this plan. What the Navy proposes is basically a death sentence to countless beings in and around Hawaiian waters. According to one of the Navy's Draft Environmental Impact Statements, the sonar sound field around this transmitting ship will be 180 decibels up to one mile away and 150 to 160 decibels up to 100 miles. This means that many marine mammals will be exposed to low-frequency sonar levels capable of causing stranding and lung hemorrhaging over large areas of the ocean. I am not alone when I say no to this plan. Hawaii's tourism depends on the sea. Many boats bring hundreds of people a day from Honokohau Harbor out to spend times with dolphins and catch glimpses of humpback whales, pilot whales, false killer whales, turtles, manta rays, sharks and more. The lure of the dolphin stretches all around the globe, and groups spend vast sums of money here in the islands because of their desire to be around dolphins. It should be noted that back in the '90s when sonar testing was present off Kona, people went into the water and developed nerve damage shortly thereafter. Marine mammals are no different if not more sensitive. Everybody knows, including the Navy, that sonar is deadly. I am not alone when I say no to this plan. The National Marine Fisheries Act granted the endangered Hawaiian monk seals and humpback whales protection. By granting the Navy permission to play war games and low-frequency sound testing in Hawaiian waters or anywhere puts marine life in danger. The Navy's plan has the potential to harm and even kill the already low numbers of monk seals. I am not alone when I say no to this plan. I understand --Equally important, low-frequency sonar levels also affect fish, and business and family fishermen could be affected. This in turn translates to reduced state and federal taxes. I understand that the Navy wants to test new equipment, new weapons, new ways of killing for the defense of this nation, but don't we already have	The Navy shares your desire to preserve marine life. The Navy believes that the proposed training will not pose a risk to marine mammals, fish, and other wildlife given that these same activities have been conducted for many years in this Study Area and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Navy training or testing on land is not included in this EIS/OEIS. The Navy is not aware of any documented cases of sonar harming people.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	enough fire power to destroy the world many times over? I am not alone when I say no to this plan. Thank you. Aloha kakou.	
R. Carley (Electronic)	The Navy's proposal of increased activity in the eastern Pacific (i.e., Hawaii and California) will be disastrous for marine life, especially for the dolphins and whales. Cetaeceans are dying from sonar blasting, and it seems the Navy couldn't care less. What about Hawaii tourism which relies on healthy oceans? Can you imagine what will happen to tourism when whales and dolphins start washing up on our shores? Thousands of people come to the islands to visit with these creatures. You will be destroying, not helping anything. You need to stop this idea dead in its tracks! Try applying your immense resources and energy to something healthy and productive for the beings on the planet from now on.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carlson (Electronic)	I am strongly against the use of the sound testing that endangers dolphins , whales and other sea life. I am writing to ask you to remember the Navy has projected that it will make deaf 1600 whales and dolphins and kill 200 EACH YEAR IN A 7-YEAR PROGRAM in training exercises.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carpenter (Electronic)	I am writing to ask the Navy to consider steps to reduce the harmful impacts to marine mammals during planned exercises that involve the use of live explosives and high-intensity sonar. I learned these planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. This is horrible!! Whales have stranded and died after major military sonar exercises. If the Navy could avoid the most harmful activities in areas used as calving grounds or migratory corridors; avoid seasonal high-use feeding areas; create a larger "safety zone" around the exercises; and use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed, it could save their lives. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please do the right thing. Save all lives!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Carr-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carr-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Carroll (Electronic)	I live in San Diego. I'm a supporter of the Navy. I also understand the need to test systems. But when it comes to this testing, I think we need to look long and hard about the benefits versus the disaster it spells for marine life. Our science has shown us, (and is showing us more everyday) that these are intelligent, curious and at times loving animals. Whales have been shown to display affection to humans who've helped them out of bad situations, like being caught up in fishing line. Should we use our heads when making decisions like this? Of course. But I would contend this decision also needs some input from the heart and when that comes into play the conclusion is obvious. DO NOT CONDUCT THIS TERRIBLY HARMFUL TESTING! Thank You.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Carter (Electronic)	I am writing to ask you to protect marine mammals during your sonar exercises on the East Coast and in Hawaii, and anywhere else such exercises are conducted. I am asking you to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	that whales, dolphins, and porpoises might be harmed or killed.	impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Castillo (Electronic)	Hello and thank you for your time, I'm very concerned about this sound testing that is going to take place. I'm trying to understand why this is necessary? Isn't there any other way? We cannot destroy these beautiful creatures that have ever right to be here, just as we do. Dolphins, whales, sea life.. I do appreciate your duty's and how difficult your jobs are, but please can you find another way to do this particular job? I beg you PLEASE DON'T Kill these incredible creatures!Our poor planet is already in such a state! We must pull together now and find alternative ways to help everyone and every living thing! I do thank you for allowing the public to comment, and please feel free to email any information about this topic, how can we fix this ? Please don't kill them! Please!! Signed, Nalini Castillo a concerned human	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		presented in Chapter 5 of this Final EIS/OEIS.
Catania (Oral-Kauai)	Aloha, Brothers and Sisters. So far the people that have been speaking up have been speaking out against militarism and destroying our beautiful Pacific. First of all, I would like to say that the reason why they're having these meetings here is to secure public support for their scam of controlling the Pacific as their own lake. They see China as their big competitor. It came out in the paper today that the head of the Navy was talking about that. As far as I'm concerned, my concern is that a working class person, every penny is being spent on war should now go to the needs of the people; jobs, housing and education like the schools over here. Now, let's get straight. Okay. The people are suffering. Enough money on war and war preparations. In fact, there's a global worldwide movement against war and militarism and corporate greed. The only people that are really benefacting out of this whole thing is the contractors and people that make missiles and bombs like General Electric. We've got to stop killing people that did nothing to us. We've got to give the land back to the Hawaiians, and we've got to start taking care of the needs of the working class.	Thank you for participating in the NEPA process.
Cavanagh-01 (Electronic)	Raymond C. Cavanagh Vienna VA 22181 July 10, 2012 Comments and Questions about Navy's HSST DEIS/OEIS of May 2012 -- Emphasis is on MMPA and ESA acoustic impact of sonars/projectors and explosives on marine mammals. 1. General Comments 1.1 The sections applying to acoustic impacts are very much like those of previous EISs (viz., USWTR, HRC, SOCAL, etc.). 1.1.1 This is disappointing - given the years that have passed in which the accuracy and readability could have been improved. Errors and misinformation and redundancy abound. More below. 1.1.2 The number of pages devoted to the subject is staggering. [I count about 200 for Vol I alone. This is not to mention the repeated attention to individual species (how many bio-histories do we need?) Why not relegate all of this to appendices or reference papers?] 1.1.3 A modest amount of editing by experts on sonars and explosives and acoustics would to it. The cost would be minimal.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cavanagh-02	1.1.3.1 A technical editor could help - to reduce the page count to 1/4 of what it is now. But the technical editor's edited text would have to be edited once more by the authors. 1.2 Precision vs accuracy is not explained. This is a perennial problem, as noted by MMC and many others. NMFS' abundance estimates for a single species and a small	The Navy has used the best available science in the development of this EIS/OEIS. The text has been reviewed and revised throughout the document's development by professional technical editors and scientists for accuracy. Levels of precision are used as provided by

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	area to 6 significant figures? What about TL estimates like 67.23 dB? SPLs like the now infamous 169.3 dB? Such reporting misleads the reader - Is accuracy suggested by these inexplicable levels of detail? Better to either fix the number of significant figures or repeat a caveat often in the text about how precision almost never implies accuracy. 1.3 If the goal of the subject sections was to induce sleep in the reader, confuse the reader, gloss over the important points, and hide the main messages, then the goal was more than met. 1.3.1 As a good example, consult the Executive Summary. None of the important issues is given any attention (e.g., what are the take counts, by species and source and action?). 1.4 Even for a veteran of acoustic risk assessments, terminology can be a mystery. 1.4.1 What is a 'Stressor?' A cause of stress? But what is 'stress?' No definition is given for this very often-used term in the text. Why confuse the issue with jargon that is not defined? Are full moons or teenagers partying in the surf or very low wind-speeds stressors? (We searched for 'stressor' in the pdf document, but found no defintion) 1.4.2 What is an 'exposure?' Please define. It looks like an exposure is the same as a take. After all, won't the take permit (LOA) be based on the number of exposures listed in the text? (Again, we searched the pdf document but found no definition of exposure.) 1.4.2.1 In a previous NMFS' document, an 'exposure' was defined in two different sections as (a) a sound level above 120 dB or (b) as any sound that the animal could hear!	source documents, which are largely peer-reviewed scientific studies. The level of detail in the document is a result of refining the document to satisfy the needs of both the public and scientists, as well as meet legal sufficiency standards of NEPA. As noted in Section 3.0.5 (Overall Approach to Analysis), "the term stressor is broadly used in this document to refer to an agent, condition, or other stimulus that causes stress to an organism or alters physical, socioeconomic, or cultural resources." The term 'exposure' is used in a number of different contexts within the document. When used in the context of a sound or energy exposure that exceeds the PTS or TTS criteria, then the predicted effect (or exposure) is similar to the MMPA term 'take.' In terms of Endangered Species Act (ESA) listed animals, NMFS also used the term exposure to mean exposure to any level of sound, energy, or stressor, which pursuant to ESA constitutes a "may affect". Due to the ambiguity, in the term "exposure", Navy has attempted to be clearer in the FEIS by referring to the numbers of animals estimated to be exposed to the various criteria as predicted effects.
Cavanagh-03	Likewise, NMFS has claimed that as regulator it can make the judgment (even years and years before the action) of whether an exposure is to be counted as a take (for a permit) or not. We have never seen such a determination in a formal take permit request. 1.4.3 Where is 'restart time?' This has been a critical NMFS' pronouncement in many risk assessments. No mention is made here. The importance is that NMFS counts takes of an animal at most once over a restart time. NMFS prescribed restart times have been documented as '24 hours' or 'duration of the exercise' – whichever is smaller. 1.4.3.1 A review of the SURTASS-LFA FEIS will show that the restart time was of order 10 days -- so that no animal could be taken more than once in that period. The consequences are huge! 1.4.3.2 Restart time gets its name from the logic that the whole take assessment is restarted after that time has elapsed. There is no memory of any previous conditions or 'exposures.' Usually, the take counts for 3 restart times equal 3 times the take counts for 1 restart time. 1.5 Basic and important acoustic quantities are almost never defined correctly, or explained, or defined at all. Some examples follow. 1.5.1 Source Level (SL) for a sonar or projector is complicated and not understood by many. 1.5.1.1 A good example is for SURTASS-LFA in which NMFS and Navy supported a 215 dB (re 1 µPa re 1 m) SL. For compliance and sonar applications, this is 10s of dBs too low for the actual, standard and traditional source level. This misunderstanding by NMFS and Navy is astounding. 1.5.2 There seems to be no understanding of the definitions of SPL, Intensity Level, EFDL, SEL, peak pressure, max SPL, and many more. 1.5.2.1 SEL is not an energy metric; it is new to underwater sound, having its derivation from in-air	As described in Chapter 5 of the EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. Through consultation and permitting with NMFS and USFWS, the Navy refined the mitigation measures, which are now presented in Chapter 5 of this Final EIS/OEIS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	acoustics. It does not allow for near-field effects, and is independent of medium (same in air as in water). Likewise for SPL as power metric. In air, from whence it came, the units are 1 µPa and assumes a 1 second normalization for pulse length. In current use, by bio-acousticians, the metric for SEL is like that for EFDL (1 µPa2-s). This is very confusing. Why not use EFDL? 1.5.2.2 For a transient signal, SPL has to have many parameters specified to give it any meaning. Many good examples of errors resulting from such lack of definition and confusion about the metric can be provided upon request. The NMFS-Navy Dose Function for sonars provides a great example of confusion about SPL. 1.6 We stop here- but many many more examples can be given as requested.	
Cavanagh-04	Raymond C. Cavanagh Vienna VA 22181 July 10, 2012 Comments and Questions about Navy's HSST DEIS/OEIS of May 2012 (Part Two) -- Emphasis is on MMPA and ESA acoustic impact of sonars/projectors and explosives on marine mammals. 2 More Specific Comments and Questions --Sonar Level B (behavioral)Take Counts for an LOA 2.1 Ten's of thousands of 'exposures' (Level B behavioral 'takes') for Sonars?. How can this be? We argue that this is orders of magnitude greater than it should be. 2.1.1 Application of the NMFS' prescribed dose-response functions (DRF) is the problem here. The input RL metric to the DRF must have been miscalculated during the risk assessment. It is supposed to be the 'mean of the mean SPLs 'and not the 'mean of the peak SPLs. ' This is per the SHOUP analysis which led to the infamous 169.3 dB estimate of the 0.5 probability of harassment, as input to the DRF. If the 'mean of the mean SPLs' was used as the RL for the DRF for the HTTS actions, the take counts would be dramatically reduced. We roughly estimate 100 Level B behavioral takes over the year, all of which could be mitigated. Sonar operating modes could reduce this even more. In fact, behavioral takes should almost always be fewer than TTS takes. 2.1.2 The NMFS' DRF form is attributed to Feller Vol 1. (It is a GREAT book and I keep it under my pillow for inspiration). No one has yet found the form in Feller since its use in 1999 for a SURTASS-LFA EIS. NMFS could not find it either - so they said the 'Feller-adapted function.' This has zero basis, and another obfuscation. Can anyone find the citation? (I have an answer, but Feller is not the sole source.) By the way, the formula given in the text 2.1.2 1 The use of the Nowacek et al playback results in construction of the NMFS' DRF is hard to defend. The animal was a mysticete and the alarm signal that caused a reaction was an FM slide from 500 Hz to 4500 Hz over a minute. That signal is not at all similar to s sonar signal - as claimed by Nowacek and NMFS (in writing). NMFS has massaged the result by saying it projected signals within the frequency band of a tactical sonar, or misquoted the bandwidth of the signal ('above 1 kHz). In addition, the signal lasted much longer than any sonar signal. These data distorted greatly the DRF shape and parameters. 2.1.3 For a typical HTTS hull-mounted sonar action, the expected number of takes (as usual, over time and space) does not at all depend on grouping of the animals. Nor does it depend on spatial distribution of the animals, given a non-	There are several contributing factors that make it inappropriate to compare takes from previous studies: • An increase in training and testing activities and the inclusion of more activities and sources to meet emerging requirements. • Combined geographical areas (areas not previously analyzed) • Updated marine mammal density information • New acoustic effects model • New acoustic threshold criteria extended the ranges to effects of sound sources and result in higher numbers of predicted level A takes. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any model used to predict marine mammal mortality and takes is only an estimate. The Navy has used the best available science in the development of this EIS/OEIS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	specific sonar track (also as usual). To say that a take estimate applies to a 'population' of animals and not to a single specific animal (as per NMFS) is contrary to the statistical bases for take counts. 2.2 Level A takes by sonars This is not possible. Collision is more likely. Theories about embolisms, bends, brain trauma etc. as impacts or causes of strandings have never been treated seriously . Any response? 3	
Cavanagh-05	More Specific Comments and Questions --Explosive Take Counts for an LOA 3.1 Precedent is not respected here. The SEAWOLF and CHURCHIL EISs use a different threshold for harassment - specifically the peak 1/3 octave band RL vs the average of the 1/3 octave band RLs.. To say that this is more 'conservative' is not a valid reason for using it. It was approved in the EISs mentioned, and reviewed by many scientists. 3.2 We doubt that the impact estimates involving the Goertner modified positive impulse could be accurate. Very few persons in the world know how this works. Impulse is not the same as positive impulse!! Impulse must be zero. The depth dependence rule is incorrect. 3.3 As we have argued with NMFS, peak pressure is not a reasonable metric for impact on animals. It does not reflect the physics of what happens when an animal (or human) approaches the surface of the water. See the AIR FORCE's JASSM and EGTTR EISs for more on this. NMFS spent a lot of time on it. 3.4 'Peak pressure' requires a careful definition for explosives. SPL is not applicable. Peak pressure cannot be measured and most be modeled. 3.5 To infer impact to animals in air from impact in water is controversial - for peak pressure or SEL. Some adhere to the concept that peak pressure itself (independent of the water or air medium) is the metric to use to estimate injury, etc. (See Ketten, Chapman, Craig, and others). Others argue that power or energy (which depend on impedance) are the appropriate metrics. What is the view from the EIS - do we need to apply dual thresholds including peak pressure (independent of impedance). These dual thresholds are key to this EIS.	The Navy has used the best available science in the development of this EIS/OEIS.
Cerio (Electronic)	Please rethink planned training exercises that use live explosives and high-intensity sonar. The impact on wildlife would be significantly damaging. I would rather these exercises stop altogether but another option is to take steps including avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Chalmers (Electronic)	Please don't do any underwater testing in the oceans. Everything that lives there should have a peaceful life. You will be destroying marine mammals that can not escape the repercussions from testing bombs and other experiments.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Chambers-01 (Electronic)	The plans that you currently have and the horrific impact it will have on marine wildlife is simply unacceptable. Considerations should be made and taken very seriously to alter these plans as to avoid the devastating impact your actions will have.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Chambers-02	By disrupting marine life you ultimately disrupt tourism and therefore the economy in the area. Sick/injured/dead marine life and marine mammals = bad tourism and economy for the area. There are much larger implications here. I plead with you to reconsider.	Section 3.11 (Socioeconomic Resources) has addressed impacts to fishing and tourism activities. Socioeconomic Resources screened for impacts on other resources that might create secondary impacts. The biological resources sections (3.4-3.9) determined there would be no long-term impacts to populations, therefore not reaching the level of "harm" as to impact tourism activities.
Chan (Electronic)	Please do not harm marine life. Don't you see the kind effects it'll do, particularly in the long term? Aren't there other ways? Even if the other methods are not cost efficient or convenient, the harm it'll do to your pockets will benefit in the long term, for everyone, including your association, we're all living in the same place, same earth. Affecting marine life apart from being morally wrong and causing extinction, it in turn, would cause fishermen, and anyone in the field which depends on the ocean and the life in it, to fall. You all are trying to make a living, and so are they. Sooner or later it's going to come back to you anyway. Wake up, and don't go along with this, think of the effects. Hear all the comments flooding the mail system, and listen to them.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		crews interacting in a variety of acoustic environments."
Chandler (Electronic)	Please do not harm our dolphins and whales.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Chaney (Electronic)	Dear Navy Sonar Testing Participants, I want you to stop sonar testing within the Pacific Region. From reading the NOAA stranding report, there is ample evidence that continuing or expanding this pracitce has the potential to harm an unknown number of marine mammals. Let's not have a repeat performance of the whaling era, albeit through this remote means of death to cetaceans. In reality, the number of stranded animals noted in the report are likely a small percentage of the number of animals killed through the use of oceanic sonar. Please discontinue the use of sonar practice, and keep our cetaceans preserved for future generations. Sincerely, Nancy L. Chaney	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Chapman (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cherivtch (Electronic)	We, the American people, are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	with your views on the above.	[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cheshelski (Electronic)	The Sonar testing you are doing in the ocean is killing whales,dolphins,and God knows what else. This has been proven, the Navy has been aware of it for sometime now, yet you continue. My daughter of 12 years old was watching Animal Planet, unaware of what she was about to see, I also had become interested in the program at this point. This program was filmed in the Ocean where they were recording sounds of the Orcas and other whales, unaware of your testing the crew that was recording was completely caught off guard by the events to follow. The beautiful sounds of the whales communicating were shattered by a horrible sound, followed by complete panic coming from every direction. The sounds/shreaks coming from these precious animals were indescribable, terror and screams of being tortured alive is about as close as I can get to describe. Alot like the screams coming from 100's of dolphins being speared with metal rods to die a slow painful death in Taiji Japan. I watched the cove by mistake and I will tell you that is a sound I have never forgotten. Please stop this Sonar testing, there are so many inhumane acts of violence, tortures, killings of animals/ people around the world, please don't be the reason for the deaths of these beautiful animals. I must add one thing. The people recording these Orcas, the looks on their faces, the tears welling up in their eyes, the sadness and hopeless look along with complete shock, knowing there was nothing they could do to help these poor animals was about all I could handle. My eyes also started to burn and I shut the T.V. off with disbelief of what I was seeing. Please, please step down on this testing, it is not worth it. I know you will do what it is that you have decided already, and I can only hope that our Navy Defense has already decided to abort Sonar Testing. We are the United States of America, and we just have to stand for something good in today's world. Honor, Respect, some sort of kindness. Thank you for giving us "we the people" an opportunity to comment on your Sonar Testing, I pray that you will make the right decision for humanity reasons. Sincerely, Cali Cheshelski Calimesa, California	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Chinchelli (Electronic)	Please don't do it! There is no need for it.	Thank you for participating in the NEPA process.
Chitrik (Electronic)	Why are you wanting or planning to conduct testing on the last remains of ocean natural habitat left on the east and west coast. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. Thanks Hanna Chitrik hychitrik@yahoo.com	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cho (Electronic)	It is unethical to harm other animals unless absolutely necessary. We have ways of collecting information and defending ourselves that do not necessitate harming so many innocent lives. In fact, when we try to enhance our own lives at the expense of others', we usually end up compromising our own security. Aquatic ecology is especially vulnerable these days; we need to be especially circumspect in this area. Please cancel the training. Thank you,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Christian (Electronic)	Dear Navy, it is not in our national interest to conduct high power sonar and explosives testing in the waters around Hawaii or anywhere at all. The needless death and harm inflicted on marine life outweighs what little benefit will be achieved. I know you guys like to blow [expletive deleted] up. I wish I could play with the toys you guys get to use and most REAL men (and a lot of women) enjoy the thrill of really big fireworks, but killing thousands and dolphins and whales just isn't worth the price... Thank you for your attention ;o)	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

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Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cicchino (Electronic)	Hello. I am an avid scuba diver and diving instructor who appreciates the variety of LIFE OUR ocean holds and in doing so, RESPECT the life contained in it. I, Renee M. Cicchino, a tax paying citizen of the United States of America DO NOT grant the US Navy permission to conduct any test which is harmful or causes death in ANY MARINE or migratory animal/mammal in the waters in which I dive! I am requesting that the US Navy finds another way to test sound/sonar than to do so in the waters that hold life - life that I and thousands of other divers, pay to experience every time we go diving. With all of the resources at the US Navy's disposal, why must you continue to test in such a barbaric way. Since there is a killing quota, the NAVY acknowledges the danger to marine life. Why not find alternative ways to test??? Computer technology, 3-D simulation something other than to harm and/or kill life that is VITAL to US as a species. Be greater than that US NAVY!!! Be BETTER than Japan, China, Norway - Show the WORLD, there are alternatives than to rape and pillage the ocean. BE A LEADER! Please. Sincerely, Renee M. Cicchino	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Cina (Electronic)	Please stop the explosions you are hurting the Dolphins and Whales!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

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Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Clare-Newman (Electronic)	While I am all for the navy doing the work it needs to in order to keep our country safe, I am concerned about marine life and the eco-systems in which we live in peace and in war. Please do what you can to reduce the impact on dolphins, whale and other sea life, finding alternate ways to do the testing necessary. Please continue to think outside the box! Thank-you.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
G. Clark (Electronic)	I understand the need for protecting our country, but another way can be found to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Please reconsider.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Clark (Electronic)	Please stop the Sonar testing. It is hurting the Sea Mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

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Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cloutier (Electronic)	This testimony is to express my concerns for underwater sonar testing. You are well aware of the impact of sonar testing to marine mammals. In particular, observations you have already made in previous testing and exercises: 1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic I would like to add that there are always unintended consequences that even intelligent people like you overlook, such as cultural and spiritual. You are well advised to give that proper consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cole (Electronic)	Why can't this testing be done out in deeper waters, instead of along the coasts?	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Comito (Electronic)	Please do not test and cause harm to the area dolphins and whales. They have no way to speak for themselves so I am speaking for them.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Concoff (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Concoff (Electronic)	Please stop this kind of testing. It is detrimental to whales and other marine mammals which it is our duty to protect. Thank you.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Coniglio	This is beyond cruel and MUST STOP !!!	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)		
Conrad (Electronic)	re: the use of high frequency underwater sound for testing in Hawaii, the California and Atlantic Coasts, and the Gulf of Mexico. Stop this testing NOW - it will deafen many whales and dolphins and kill more of them. Just horrid and cruel!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Corey (Electronic)	I have just finished reading much of the EIS/OEIS report. I am especially concerned on the impacts of the Navy's explosive and sonar testing in the Pacific areas addressed in the report. I want to firmly protest the negative impacts this proposed testing will have on the whales, dolphin and other mammals in this area. The thought that any amount of these species being harmed, in such as way as to drive them from their habitat of the coastal areas there, that are their feeding and mating grounds is unacceptable. Even worse to see it is quantified and acceptable to cause deafness, tissue damage and general suffering, or whatever pain and discomfort these tests cause is beyond just unacceptable into the highly objectionable range. How can the military of the United States depend on, design and plan to implement a project to save human life by increasing our security when it is dependent on the loss of other life that are not our enemies and cohabitate peacefully beside us? This is a flawed argument with a bias against other species even to their death and displacement. I believe that the mammals and all creatures of this earth have the unquestionable right to live freely without harassment, suffering or pain inflicted on them by any of our human activities. We do not possess this right to do so and any action that harms another and so grievously with forethought is immoral, ignorant and totally without merit. I therefore state my objection to this testing, to the premise this testing rests on and any future execution of this plan. I firmly resolve to do what i can, within the power i have as a citizen of this land to stop,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	object, publicize, promote dissent, inform, and disperse this information and its disastrous consequences to all parties within my circle of influence with the intention of collectively working to thwart, stop and beseech the United States of America Navy, its generals, our congress and our President to remove any authorization to proceed with such a plan. In short, please reassess- its egregious and i would be ashamed for any agency of my country to be engaging in these horrendous practices under the banner of protection of our rights, liberty and lives. We are not the only ones living here. Sincerely, C. Corey	
Costa (Electronic)	please do not conduct these tests. thousands of animals will be tortured, deafened, and other thousands will die.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Courbis-01 (Written)	As a member of the public and an expert in marine mammal science, I respectfully submit the following comments on the Navy's Hawaii-Southern California Training and Testing Activities Draft Environmental Impact Statement/Overseas Environmental Impact Statement for your consideration. To begin with, I have concerns that the draft EIS/OEIS does not fully consider the scientific documentation of strandings of marine mammals that may be associated with the types of activities proposed by the Navy. For example, the work of Wang and & Yang (2006) indicating pygmy killer whales stranded in Taiwan as a result of active sonar & seismic operations is dismissed as "not supported by the data available" on page 3.4-45. In addition, there is no mention of the concurrent unusual melon-headed whale activity in Hanalei Bay, Kaua'i and Sasanhaya Bay, Rota, Northern Mariana Islands in 2004. These "strandings" are both included in the report "Marine Mammal Strandings Associated with U.S. Navy Sonar Activities" (April 2012)	The Navy shares your desire to preserve marine life. The Navy believes that the proposed training and testing will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at NMFS Office of Protected Resources website. For a complete analysis of stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	associated with the Atlantic Fleet Training and Testing EIS (http://aftteis.com/Portals/4/aftteis/Supporting%20Technical%20Documents/Marine%20Mammal_Stranding_Report_v02.pdf). The Atlantic Navy report describes five stranding events associated with U.S. Navy sonar activities and five stranding events speculated to be linked to U.S. Navy sonar activities. I suggest that the Hawaii-Southern California EIS/OEIS include details of the Hanalei Bay incident and that it acknowledge the heightened risk for certain species documented to strand during Naval activities. In addition to melon-headed whales, beaked whales are considered to be especially vulnerable to injury and death associated with Navy sonar (five beaked whale stranding events with potential links to Navy sonar activity are described in the Atlantic EIS cited above). Although such strandings of beaked whales associated with Naval exercises have not been seen in Hawai'i, the science indicates that animals affected by Navy sonar in Hawai'i may not be easily detectable (Faerber and Baird 2010). Overall, my recommendation is that the Navy expand its description of potential impacts to include a more thorough treatment of historical stranding information as done in the Atlantic EIS and acknowledge that species such as melon-headed whales and beaked whales have higher risks for injury and death. Potentially, a variable regarding higher risk should be incorporated into the model for calculating take of these species. Although not described in detail, five stranding events identified as including U.S. Navy exercises as a contributing cause are listed on page 3.4-113. This and other stranding events illustrate the need for mitigation plans for live and dead strandings. Although I am aware that the Navy has participated in carcass removal and necropsy in past strandings in Hawai'i, I encourage the Navy to develop a more formal mitigation plan as part of the EIS/OEIS. I understand that a regional stranding implementation plan is being developed collaboratively between the Navy and NOAA. I encourage the Navy (and NOAA) to seek input from the State of Hawai'i and the Pacific territories and to incorporate cultural considerations into protocols. This does not require the Navy to take formal responsibility for causing any marine mammal stranding, but it would make the Navy a formal partner in the activities necessary to deal with stranded animals. This should include monetary support for removal of animals and appropriate necropsy and sampling. It is to the Navy's benefit to have full necropsy and sampling done on stranded animals to reduce speculation that the Navy is responsible for deaths that have not been properly investigated. Funding for such necropsy work has gone down significantly in recent years.	http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ An integrated monitoring plan for the activities in the HSTT Study Area is also planned as presented in Section 5.5.1.1 (Integrated Comprehensive Monitoring Program) of the Final EIS/OEIS. The Navy will continue to implement the monitoring and research programs where training and testing has been occurring to determine if there are determinable impacts as a result of those activities and will do so in the HSTT Study Area associated with future training and testing occurring there. The Navy will continue to be a leader in funding of research to better understand the potential impacts of Navy training and testing activities and to operate with the least possible impacts while meeting training and testing requirements.
Courbis-02	The EIS appears to dismiss some of the science associated with mid-frequency sonar effects on marine mammals. On page 3.4-95 it states "As a result, no marine mammals addressed in this analysis are given differential treatment due to the possibility for acoustically mediated bubble growth." Regardless of the mechanism, it is clear that certain species, like the beaked and melon-headed whales, can be affected by mid-frequency sonar. Bemaldo de Quiros et al. (2012b) found that deep diving marine	The Navy used the best available science to develop its analysis and appropriate mitigation measures. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	mammals have a higher risk of decompression; that risk should be considered in determining levels of take. Further, the protocols designed by Bernaldo de Quiros et al. (2012a, 2012b) should be included in official necropsy protocols.	could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The U.S. Navy has conducted active sonar training and testing activities for decades in the sea space depicted in the Study Area with no documented proof of injuries to marine mammals. Though the intensity of training and testing will increase, the events are of relatively short duration and therefore the Navy does not anticipate long-term population level impacts.
Courbis-03	The Navy acknowledges on page 3.4-92 that long-beaked dolphins have been directly killed by Navy activity in an incident involving explosives. This illustrates the importance of mitigation zones. Some odontocetes are more cryptic and surface less often than long-beaked dolphins. As such, I recommend that the Navy not reduce any of the mitigation zones used in the previous EIS/OEIS. Smaller mitigation zones, as proposed in the draft EIS/OEIS, will only increase risk to marine mammals. Even if animals are not at risk for direct injury by the sound, it is clear that behavioral responses of marine mammals can be contributing factors to injury and death, suggesting that mitigation zones should be conservatively large to account for behavior-induced injury.	The mitigation measures listed in the Chapter 5 of the DEIS/OEIS are the result of the consultation with NMFS and USFWS. Mitigation under MMPA will be coordinated through the Letters of Authorization from NMFS. Mitigation under ESA will be coordinated through the ESA consultation between the Navy and NMFS and USFWS.
Courbis-04	Page 3.4-97 states that "Hearing loss resulting from auditory fatigue could effectively reduce the distance over which animals can communicate, detect biologically relevant sounds such as predators, and echolocate (for odontocetes). The costs to marine mammals with temporary threshold shift, or even some degree of permanent threshold shift have not been studied." There are some studies of threshold shift in cetaceans (e.g. Mooney et al. 2009, Nachtigall et al. 2004). These studies examine things like TTS frequencies and behavioral effects of sonar. Studies also describe odontocete immune response to sonar pings and seismic water guns (Romano et al. 2004). I did not do an exhaustive search of the literature, but further information about TTS and PTS should be reported in the EIS as a quick search indicates some is available.	. The discussion in the EIS/OEIS relies on years of rulemaking, previous Navy NEPA documents analyzing the same actions, and extensive research cited throughout 3.4.3.1. Specific to the latest development of the criteria including TTS and PTS, please see Finneran and Jenkins (2012), which is cited throughout Section 3.4.3 and is available for review at the HSTT EIS/OEIS website.
Courbis-05	The EIS/OEIS states on page 3.4-93 "The potential for auditory trauma in marine mammals exposed to impulsive sources (e.g., explosions) is inferred from tests of submerged terrestrial mammals exposed to underwater explosions (Richmond et al. 1973; Yelverton et al. 1973; Ketten et al. 1993)." Terrestrial mammals do not have the same hearing physiology and mechanisms as marine mammals, though some ear structures are conserved among the mammals. I am not clear on how terrestrial data can be translated to marine mammal potential for auditory trauma. A clearer explanation of this link would be helpful to assess whether this comparison is appropriate. Darlene Ketten has published a number of articles on cetacean hearing physiology, and Cranford et al. (2008) reported on sound transmission and reception in Cuvier' s beaked whales using CT scan information, which could be cited in this section.	. The development of conservative criteria and thresholds for marine mammal impact analysis has a long history of considering research from terrestrial animals including humans. There is no additive useful information provided by Cranford et al (2008) that is required by the analysis or otherwise assists in understanding of impacts to marine mammals or beaked whales in particular. Section 3.4.3.1 of the EIS/OEIS provides a synopsis of the information required and provides citations for those interested in looking into the history of the development of environmental impact analyses as related to marine mammals hearing. It is suggested that the commenter start with the cited Southall et al (2007) reference as a baseline overview for

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		understanding the history and use of terrestrial mammal hearing to assist in developing marine mammal hearing impact thresholds.
Courbis-06	Because the Navy's model of biologically significant population consequences of Navy activities included abundance estimates, the Navy EIS/OEIS choses to combine what are now considered separate populations of marine mammals among the Hawaiian Islands for the analysis. This is biologically inappropriate and does not account for the lack of dispersal among island regions. Because populations of many odontocete species are now scientifically documented to be local and island-associated, an analysis of impact by population is necessary to assess affects to these populations. If this assessment cannot be conducted now because of the need to use abundance estimates in the model, I have suggestions. One, the fact that these populations are separate should be acknowledged and described, with a full literature review, in the EIS/OEIS. Two, the letter of authorization and EIS/OEIS should include language that reflects a commitment to do new calculations as abundance estimates become available. With the new Guidelines for Marine Mammal Stock Assessments becoming finalized soon and the new research that is becoming available regularly, abundance estimates for many of these stocks should likely be available before the next reauthorization, so I encourage quick turn around on updating impact estimates as these data become available.	The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. Active sonar is currently the most effective way to locate submerged enemy submarines before they are close enough to sink U.S. ships. To successfully defend against submarines and other underwater threats, such as mines, Sailors must train realistically with the latest technology, including both passive and active sonar.
Courbis-07	Another aspect of local populations is that displacement of these populations could be permanent or long-term. Other members of the species may not be able to repopulate an area where animals are displaced. Alternatively, movement of local populations out of the area may not be possible if marine mammals have behaviorally adapted to the area. Some high-risk species like melonheaded whales and Blainsville's and Cuvier's beaked whales show evidence of local populations near the Island of Hawai'i (Aschettino et al. 2011, Baird et al. 2011, McSweeney et al. 2007). The increased risks associated with local, island-associated populations should be described in the EIS/OEIS and potentially taken into account in the modeling.	The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. Active sonar is currently the most effective way to locate submerged enemy submarines before they are close enough to sink U.S. ships. To successfully defend against submarines and other underwater threats, such as mines, Sailors must train realistically with the latest technology, including both passive and active sonar.
Courbis-08	The Navy should identify known "hot spots" for species and preferentially avoid hot spots for Endangered, Threatened, and Candidate marine mammals unless there is a National Security issue. There is already some mitigation of that nature in place for humpback whales. There is extensive research on monk seal and false killer whale movements (e.g. Baird et al. 2012) that should be considered in the EIS/OEIS as areas to avoid Navy activity if possible.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The Navy has used the best available science in the development of this EIS/OEIS.
Courbis-09	On page 3.4-107, the EIS states "Humpback whales showed a trend from negative to	Bow riding dolphins may quickly move out of the sound path if they break from bow riding because of the speed of the ship. If dolphins

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	positive reactions with vessels during the study period. The author concluded that the whales had habituated to the human activities over time." I urge the Navy to not use terms like "negative" and "positive" because they suggest that there is a "positive" way to harass marine mammals. Even marine mammals engaged in approach are not necessarily experiencing a "positive" interaction. For example, calves of dolphins fed by humans in Shark Bay Australia have up to twice as much calf mortality than unprovisioned dolphins in the area (Mann et al. 2000). Although one could argue the dolphins "choose" to interact with humans and to take handouts, it is not actually in their best interest biologically because it distracts them from protecting and rearing their calves. This is a "positive" interaction with negative consequences. It is also important to remember the difference between habituation and tolerance. Some animals may not have anywhere else to go and therefore, tolerate disturbance. The draft EIS/OEIS states on page 5-24 "The Navy will cease transmissions when a marine mammal is sighted within 200 yd. (183 m). The exercise will re-commence if one of the following conditions are met: the animal is thought to have exited the mitigation zone and the mitigation zone has been clear from any additional sightings for a pre-established amount of time; the vessel has transited more than a pre-established distance beyond the location of the last sighting; or if the ship concludes that dolphins are deliberately closing in on the ship to ride the vessel's bow wave." Although the EIS/OEIS indicates that bow-riding animals would be out of the main transmission axis of active sonar, bow-riding behavior can cease at any time and approaching animals could be in danger of sonar affects. Again, it is important to remember that because an animal "chooses" to approach the vessel does not mean the animal is unaffected by sonar-animals do not always make the best choices for their own health and safety.	move into the sound path and remain in the mitigation zone, then mitigation procedures would apply and sonar would be powered or shut down as appropriate.
Courbis-10	I support the continued implementation of Marine Species Awareness Training and use of lookouts. I suggest that mitigation measures could also include passive acoustic monitoring to help detect cryptic and long-diving marine mammals. The EIS/OEIS mentions that marine mammals are sometimes detected this way, but does not include passive acoustic detection in protocols for mitigation, with the exception of increased vigilance by lookouts. Passive acoustic detection and localization of marine mammals has come a long way in the last few years. The Journal of the Acoustical Society of America will be publishing a special issue on methods for marine mammal passive acoustics later this year. We encourage the Navy to continue to get the latest information to inform mitigation that includes passive acoustic monitoring and detection. Acoustic monitoring has also been done for several years off Hawai'i's coasts through the University of Hawai'i. We encourage the Navy to continue to support these efforts and use this information to learn more about "hot spots" of cetacean activity near the Hawaiian Islands and incorporate this information into updates of the letter of authorization and to develop better means of detecting and localizing cetaceans near testing and training exercises.	Passive acoustic monitoring is already and will continue to be implemented with several activities. Information on mitigation measures can be found in Chapter 5 of the DEIS and FEIS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Courbis-11	The Navy's main mitigation measures include visual detection within a radius of the activity and cessation of the activity until the marine mammal has not been seen for 30 min. This may not cover the beaked whales and sperm whales well, as these species can be under the water for more than an hour at a time without appearing at the surface. I suggest movement to a new area or at least an hour without seeing these species before restarting activities. I also encourage as much wait time as possible for cryptic species that are difficult to see, such as pygmy and dwarf sperm whales.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0)

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Courbis-12	On page 3.4-57, the draft EIS/OEIS states "There are no significant species-specific threats to spinner dolphins in the Study area." The species-specific threats associated with swimming with spinner dolphins in Hawaiian bays are well documented (e.g. Courbis 2007, Courbis and Timmel 2009, Danil et al. 2005, Timmel et al. 2008), and NOAA published a Federal Register notice of intent to propose rulemaking to protect spinner dolphins from human interactions in Hawai'i (National Marine Fisheries Service 2005). With the number of publications and the intent of NOAA to engage in rulemaking on the issue, swimming with spinner dolphins should be considered a significant species-specific threat.	Thank you for participating in the NEPA process.
Courbis-13	The Navy cites the Hawaiian Islands Humpback Whale National Marine Sanctuary as reporting as many as 12,000 humpback whales in 2010; however, the citation is not included in the bibliography of the EIS/OEIS. We suggest that abundance of humpback whales be determined based on the primary literature, such as Calambokidis et al. (2008) (Hawai'i) and Barlow et al. (2011) (North Pacific). I encourage the Navy to use abundance estimates from directed scientific studies in primary literature for modeling of population level effects of Navy activities.	Thank you for participating in the NEPA process.
Courbis-14	The EIS/OEIS states on page 3.4-115 'The best assessment of long-term consequences from training and testing activities will be to monitor the populations over time within the Study Area. A recent U.S. workshop on Marine Mammals and Sound (Fitch 2011) indicated a critical	The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	need for baseline biological data on marine mammal abundance, distribution, habitat, and behavior over sufficient time and space to evaluate impacts from human-generated activities on long-term population survival." I am aware that the Navy helps to support a variety of research on marine mammal populations in the Hawaiian Islands. I encourage the Navy to continue to support research as an indirect mitigation strategy.	technologies that will protect and defend the United States. Active sonar is currently the most effective way to locate submerged enemy submarines before they are close enough to sink U.S. ships. To successfully defend against submarines and other underwater threats, such as mines, Sailors must train realistically with the latest technology, including both passive and active sonar.
Courbis-15	On page 3.4-239, Figure 3.4-15 appears to be incorrect. The text states that there were nine humpback whale vessel strikes in 2009 and four in 2010, but no strikes appear in the figure.	The text and the figure indicate **multiple species** and multiple vessel sources in the years 2009 and 2010. There were **no** Navy whale strikes in Hawaii during 2009 or 2010 which is correctly indicated in the figure.
Courbis-16	On page 3.4-243, the EIS/OEIS states "Based on the probabilities of whale strikes suggested by the data the Navy is requesting takes by morality or injury of 15 large marine mammals over the course of the 5 years of the HSTT regulations from either training activities of no more than 15 large whales from either training activities over the course of the 5 years of the HSTT regulations. This would consist of no more than four large whales in any given year." This is a confusing sentence. It sounds like the proposal is to get a letter of authorization for take of 15 large whales by vessel strike, but it is not clear what a "large marine mammal" vs. a "large whale" is. This request is broad, asking for takes across species and across populations (stocks) of species. In the past, the maximum number of whale strikes by the Navy across the entire SOCAL and Hawai'i ranges in a five-year period was ten. If the Navy were striking 15 large whales in five years, that would be a large red flag with respect to its activities in comparison with the past 20 years. This also must be considered in the context of several endangered large whale species (sperm whales, humpback whales, blue whales, fin whales, and sei whales), urging caution. I suggest requesting permission for striking 10 large whales rather than 15 over a five year period. Alternatively, I suggest that if more than ten whales are struck in five years, it should trigger an investigation into what has caused an increase in whale strikes and how that cause can be mitigated.	The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Courbis-17	I have some concerns about the request for a five-year letter of authorization, as previous letters have been less than five years, though I understand the administrative burdens and costs associated with constant permit renewals. Although I recognize that the law allowing for a five year permit requires re-authorization with the publication of significant new information, I encourage the Navy to include language in the EIS/OEIS that makes it clear that new science will be used to adjust model outputs and change mitigation strategies as it becomes available and will not wait for the termination of the permit period.	The Council on Environmental Quality guidance encourages federal agencies to develop internal processes for post-decision monitoring to ensure the implementation and effectiveness of the mitigation. It also states that federal agencies may use adaptive management as part of an agency's action. Adaptive management, when included in the NEPA analysis, allows for the agency to take alternate mitigation actions if mitigation commitments originally made in the planning and decision documents fail to achieve projected environmental outcomes. Consistent with the cooperating agency agreement with NMFS, mitigation and monitoring measures presented in this Final EIS/OEIS focus on the requirements for protection and management of marine

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		resources. A well-designed monitoring program can provide important feedback for validating assumptions made in analyses and allow for adaptive management of marine resources. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. Active sonar is currently the most effective way to locate submerged enemy submarines before they are close enough to sink U.S. ships. To successfully defend against submarines and other underwater threats, such as mines, Sailors must train realistically with the latest technology, including both passive and active sonar.
Courbis-18	I am aware that the Navy has considered and discarded a list of mitigation measures described on pages 5-52 and 5-53. I encourage the Navy to reconsider sharing marine mammal sighting data to augment scientific information, minimizing as much as is possible testing and training activity that takes place during sea states or light levels at which marine mammals are unlikely to be seen by lookouts (or alternatively increasing radii of mitigation, passive acoustic monitoring for marine mammals, or wait time when marine mammals are spotted), and avoiding "'hot spots" of marine mammal activity, particularly for those animals that are listed or candidate species under the Endangered Species Act. I appreciate the value of military readiness but also believe strongly in protection of the resources and culture that make a Hawai'i unique and special place. I encourage collaboration and dialog among stakeholders and the Navy to provide the best protection to both people and the environment.	The Navy shares your desire to preserve marine life. The Navy believes that the proposed training and testing will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at NMFS Office of Protected Resources website. For a complete analysis of stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ An integrated monitoring plan for the activities in the HSTT Study Area is also planned as presented in Section 5.5.1.1 (Integrated Comprehensive Monitoring Program) of the EIS/OEIS. The Navy will continue to implement the monitoring and research programs where training and testing has been occurring to determine if there are determinable impacts as a result of those activities and will do so in the HSTT Study Area associated with future training and testing occurring there. The Navy will continue to be a leader in funding of research to better understand the potential impacts of Navy training and testing activities and to operate with the least possible impacts while meeting training and testing requirements.
Cox	Please protect marine mammals from the effects of sonar testing as recommended by	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	the HSUS. Thank you.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Coyle (Electronic)	We can all appreciate the many jobs the U.S. Navy performs, national security and education in particular. Proposed exercises are known to cause great harm to marine life. While we are protecting the U.S.A., it seems we would want to protect the health of our oceans. My hope is the Navy will take all steps possible to minimize damage. The health of our oceans aids in keeping our country strong. Please take every marine life safety step you can. Thank You for your consistent hard work, Kate	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. Thank you for your comment.
Craddock (Electronic)	I truly do support our armed forces. I know that we need to conduct training exercises in order to further our technology, however, I do not approve of doing so in such a way that endangers wildlife. Please find an alternate solution. I know that you can find other means to ensure both our safety, and the safety of innocent lives. Thank you, A concerned and supportive citizen.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Cramer (Electronic)	I am concerned for the well-being of the marine mammals that may be impacted by sonar and other naval testing. This Environmental Impact Statement (EIS) estimates more than 1,600 marine mammals each year will suffer from hearing loss or other injury from its use of sonar and explosives over the next five years. The EIS/OEIS also predicts 200 sea mammals could die each year in its Hawaiian and Southern California training and testing areas. I know protective measures are put in place but marine mammals are very important to people and hold a lot of value. Please consider the least harmful alternative.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cranden (Electronic)	I find the news of the Navy testing explosives and sonar to be both distressing and altogether horrifying. I cannot believe that our country would sacrifice and put in harm's way so many living things. These are not simply after-thoughts; they are living, breathing, feeling, thinking animals. They do not deserve this kind of careless and thoughtless mistreatment. Please reconsider for the sake of our oceans and these incredible animals we have fought so hard to protect over the years.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Crawford (Electronic)	I love my cozy life in the U.S. as a native born citizen, and I want it to continue. I value our Navy, and its role in protecting our country. But..... injuring, terrifying and/or killing the ocean animals for testing explosives and sonar is not acceptable. Please accept this message from a U.S. citizen who abhors the Navy's testing procedures in the world's oceans, and will always stand up against it. Sincerely, Valerie Crawford McMinnville, OR	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cresko (Electronic)	It is AWFUL that Marine life,such as Dolphins and Whales are severely affected by the Sonar Operations. The Navy should work with NRDC to find ways to eliminate the impact on these species. I am sure the majority of the American people would agree!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The Navy is working with NMFS, the Navy's cooperating agency and the regulator under the MMPA, to finalize mitigation measures through the permitting and consultation processes for MMPA, ESA, and other laws as required. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cullen (Electronic)	I fully support the Navy's training and testing activities to the extent necessary, regardless of any so-called environmental effects.	Thank you for participating in the NEPA process.
Cunningham-Welsh-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Cunningham-Welsh-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Curington (Electronic)	To the US Navy: Please do not carry through on your proposal to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii, involving the use of live explosives and high-intensity sonar. I understand the need for protecting our country, but you can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. If testing plans as they stand happens, it will KILL 17,700 cetaceans. Without their hearing, dolphins will be unable to use their echolocation to hunt. Whales will not be able to communicate. It will make it impossible for all cetaceans to survive. Please rethink this!This operation should not be allowed to go through. The consequences are far too severe. Sincerely, Alexi Curington, Seattle, WA	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically Navy records have had few to no mortalities from sonar or explosives. Any model predicting takes is only an estimate.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Cutillo (Electronic)	Please stop the testing on whales!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
Dako (Written)	Opposed.	Thank you for participating in the NEPA process.
Daly-01 (Electronic)	I am saddened to hear that the U.S. Navy is proposing to conduct training exercises in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. I urge you to please do just that.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically Navy records have had few to no mortalities from sonar or explosives. Any model predicting takes is only an estimate. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
Dameron (Oral-Kauai)	Thanks for the opportunity to speak. My name is Karin Dameron. It's not acceptable to the have detrimental impact on the ocean and all its contents so that military people can be trained and munitions can be tested. No level of displacement, harm or death of marine life is acceptable. We as a nation could be pursuing peace and preservation. The billions of dollars spent on building an offense or a defense is a waste of our planet's resources and is a detriment to our livelihood and planet. A blanket EIS to cover whatever harm the Navy may impose is not legal or acceptable. We have many things that the Navy could be cleaning up with the billion of dollars that are being spent. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Daniels (Electronic)	SUCH GREAT GIFTS TO THE EARTH, THESE MAGNIFICENT SPECIES ... WHY MUST WE ALWAYS CRIPPLE OR DESTROY THEM? THE NAVY IS BIG ENOUGH TO FIND ANOTHER WAY AND SHOULD BE ASHAMED IF IT DOESN'T! SURELY MEN OF THE SEA WOULD RESPECT THOSE THEY SHARE WATERS WITH!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
Das (Electronic)	Dear U.S. Navy, Please protect marine mammals from explosives and sonar. Thanks, Victor	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Dash (Electronic)	I am writing to protest the testing of weapons that cause mass cetacean injury and death.This is a terrible way to waste a lot of money.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Daussat Adimina (Electronic)	I must protest this appalling proposal resulting in a disaster for a great many fellow creatures.I have lived through four wars and have some knowledge of both duty and catastrophy engineered by man.Please do not inflict destruction on already imperiled life on our precious and fragile planet.If we have the technology and willingness to explore our universe why must we destroy life as we go?We have a solemn obligation as well !as a vested interest in our survival, but first we must preserve what remains of our integrity in preserving it for life's other manifestations here!I spent my entire fifty years of married life as the proud wife of an Officer, if this proposal is implemented, that pride and faith will be tarnished..how sad for us all who believe in the human impulse to nurture life not destroy it.Juanita D. Adamina	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
A. Davis (Electronic)	STOP THIS MADNESS! The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. I AM APPALLED BY THIS TRAINING/KILLING ECERCISE. STOP THIS MADNESS angelika davis citizen and taxpayer of the USA	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS).

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically Navy records have had few to no mortalities from sonar or explosives. Any model predicting takes is only an estimate. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
S. Davis-01 (Electronic)	I have concerns about the increased use of active sonar as well as explosives and the effects both may have on marine mammals in the area.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
S. Davis-02	In addition I don't think the EIS takes into account the social and cultural impacts caused by this increase in the militarization of seas around Hawaii. By making military use the first and highest priority for the seas around Hawaii it sets a dangerous precedent and could effect other uses of the ocean space that may be more economically, culturally and scientifically valuable for the people of Hawaii. I ask that the training activities of the Navy be curtailed, not expanded.	As described in Section 3.10 (Cultural Resources), Section 3.11 (Socioeconomics), and Section 3.12 (Public Health and Safety) of the Draft EIS/OEIS, the Navy's proposed activities are fully compatible with other uses of the ocean space around Hawaii. The Draft and Final EIS/OEIS fully considers the potential social and cultural impacts associated with the proposed activities. As explained in Section 2.5 (Alternatives Development) of the Draft EIS/OEIS, the range of alternatives considered by the Navy must be reasonable alternatives. To be reasonable, an alternative must meet the stated purpose of and need for the Proposed Action. A curtailment or reduction in the number of training and testing activities would not meet the stated purpose of and need for the proposed action, and would therefore be unreasonable. The Navy is not expanding the area where training and testing occurs, but is simply expanding the area that is to be analyzed in the EIS/OEIS as part of a phased compliance approach.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
De Meurisse (Electronic)	This potential disaster must not be allowed to happen. As Americans we are proud of the U.S. Navy and the work being done to protect our protectour country, but to put marine mammals at such cruel and inhumane dangerwould lead to embarassment and protests from all other concerned countries. We should protect, preserve and respect these mammals to the highest degree possible. I urge the Navy to take the appropriate action put forth in the letter. Respectfully Sheila de Meurisse	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
De Tavira (Electronic)	Please protect marine mammals from explosives and sonar, Thanks in advance	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis.
DeCaro (Electronic)	Please.. there are other ways to test sonic water frequency range missiles. I know there is a war on, and I know that the NAVY is terrified of the potentiality of long range missiles, but there has to be another way ... a pool or some form of testing that would not do undue damage to which the likes of which a military based operation does not seem to care about. The biological aspects should intertwine with the safety of human kind, because we are animals, with animals and although we have the potentiality to do what we think we can, this will result in hardships of which will cause a cataclysmic undue hardship and end to life to which the ecology of it tying it to our own selves will be unable to right once it is wronged. Please don't be the bad guys, I know you want to be the good ones and save people but this effects people too.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Currently sonar is the best means of locating small objects in the water. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
DeFalco Lippert (Electronic)	I heard, that you are planning Sonar experiments in and around Hawaii. Please do not do so! Sonar tortures and kills whales and dolphins (as they are loosing their orientation) - and there are so many whales and dolphins living around Hawaii! Please remain sensitive to nature and it´s animals. Hawaii is such a paradise... Thank you very much! How many more whales and dolphins have to die before you admit that Navy testing is causing it???? Cetaceans face enough threats, from toxic pollution to habitat destruction to death from impacts by ships, to outright killing by humans. Stop contributing to their deaths and cease all sonar and other testing that is harming them!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Dente (Electronic)	This can't be a fair process unless communities up and down the entire Pacific coast have hearings in them. I am completely against any military expansion, any sonar at all, and war games anywhere in the world. The military is bankrupting the nation, and	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	creating terrorists by their oppressive presence and their brutal tactics. Bring the troops home. Stop the endless war for the profit of a few. End America's reign of terror, now!	
Dente (Written)	STOP ALL SONAR TESTING!! TOTAL WASTE OF TIME AND OUR TAX DOLLARS PLUS IT IS KILLING UP TO 1600 WHALES AND DOLPHINS AND MAKING DEAF 11,200 MORE. GET OVER THIS WAR MACHINE ATTITUDE!! This nation will not be "done in" by nuclear missiles from the sea, but rather cyber space attacks. Any nation will think twice before disabling by nuclear missiles because they will have to deal with millions of dead bodies. But, knocking out all our satellites is a sure way to gain control of us. Meantime go clean up the radioactive waste ready to land on our beaches any day now. Do something constructive, not destructive.	Thank you for participating in the NEPA process.
Devine (Electronic)	I would like to make the observation that the supposed benefit of the scale of sonar testing/training does not justify the potential harm to marine wildlife. History teaches us that the majority of national security decisions relating to naval matters do not largely rest on technical or technological matters. The fact that the US Navy over-obsesses about technical matters has been noted by many authors. Indeed the decisive moments of US naval history have not been decided by technology but rather by poor decision-making and a lack of understanding of opponents motives. Pearl Harbor, USS Cole, USS Maine, USS Vincennes (CG-49), USS Pueblo, Gulf of Tonkin....etc. These are not moments when history was changed by Sonar technology but by flawed decision-making. Better to save the marine life and concentrate on wargaming and proper decision-making. Sonar is only a tool but is becoming a fixation for the US Navy. The US Navy should also push for rules limiting the use of Sonar by foreign navies as well – to be enforced by international monitoring and sanctions if rules are violated.	Please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) for a discussion on how the Navy uses active sonar at the lowest practicable source level and number of hours consistent with mission requirements. Strike groups are constantly evaluated and exercises are modified to ensure each strike group receives the training necessary to achieve required readiness levels.
R. Devine (Electronic)	Errors may sometimes represent approximations to successes or correct paths; other times errors may reveal a total lack of connection to successful paths. Errors of misemphasis or overemphasis can be very serious, as in the U.S. Navy's testing of sonar devices, seriously affecting marine life yet not responsive to a clear and present danger. While sonar is a useful, and necessary device, the over-testing of finely calibrated sonar draws attention away from more serious military matters. Over testing can lead to a false sense of preventing dangers and divert attention from the most serious problems.	Please refer to Section 5.3.4.1.3 (Reducing Sonar Source Levels and Total Number of Hours) for a discussion on how the Navy uses active sonar at the lowest practicable source level and number of hours consistent with mission requirements. Strike groups are constantly evaluated and exercises are modified to ensure each strike group receives the training necessary to achieve required readiness levels. The Navy employs new technology where feasible to reduce impacts. One example is the use of passive sonar to listen for the presence of marine mammals prior to starting a sonar activity.
Diamond (Electronic)	Please do NOT test in ocean around Hawaii and California. Do NOT see any good that can come from such knowing torture our ocean life will go through. This type of testing and training is unnecessary. Please think of other ways that will not impact our oceans and environment to do testing/training exercises. Thank You for your time. If the Navy follows through with this kind of cruel activity, I will re-consider my support and thoughts towards the U.S. Navy. I will be sharing this issue with everyone I know on all types of	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	media available. Thank You and hope you do not follow through with testing/training in Hawaiian/California waters.	species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Diaz (Electronic)	To whomever it may concern: im very concern that our marine wild life will be harmed by the navy testing of sonar in our oceans please think about our marine life whichis already been harmed by the E-241xtinctionE-241 as well excessive testing in the ocean waters. Stop the testing and save our marine life from E-241xtinction. Let our marine life live in peace and not in misery. The marine life is here for us to enjoy and not to destroy.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Dietrich (Electronic)	I am outraged at the navy's action towards our marine life and oceans. Using DISORIEBTING Sonar should not be used at all anywhere in the world. This is directly directed at all sea life, especially our marine mammals and other human species. I cannot believe that our own Navy is involved in the permanent destruction of our Whales, Dolphins and other Marine Life, destrying family after family with Sonar and also Target Practice. Who knows what else is being done to those highly intelligent creatures. I urge the end of this plan for a five year expansion to destroy our Pacific/Atlantic Coast. This inhumane practice needs to end. No more Sonar Killings of our earths mammals. Please Respect our Oceans.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. It is important to note that the Navy uses sonar not only for testing, but for training. In fact, the majority of the sonar use is related to training, training that is essential to the preparedness of deploying forces.
Disch (Electronic)	Please refrain from the planned bombing and detonation of explosives in the ocean. It will cause irreparable harm to marine species. It is cruel and unnecessary. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Doak (Electronic)	We must stop pretending that the effects of our human actions are unimportant and that the value human life is greater than other life, it is not. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Dobson (Electronic)	Please stop the undersea high frequency, or at least redesign it in a way the does not harm whales and dolphins. Your own estimates of killing 1800 whales and dolphins, and deafening as many as 15,900??? How are we any better than whaling nations like Norway and Japan? We aren't. The United States is being covert and hypocritical in allowing this. Naval practices are much more lethal to endangered sea life than any other "whaling" nation. This is WRONG.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically Navy records have had few to no mortalities from sonar or explosives. Any model predicting takes is only an estimate. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Dooley (Electronic)	Please do not begin testing in the waters surrounding Hawaii puting any of these precious and amazing animals at risk of injury inCluding hearing loss or worse yet - death. The animals of this area are unbelievable and should NOT be put at risk for any reason. This is such a God given specacular environment and it should be preserved.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Dorothy (Electronic)	This is heartless and inhumane what gives you the right to take away or harm these beautiful creatures some of them may be gone forever how do you take this away from our children and grandchildren	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Downs (Electronic)	Sonar testing is dangerous to marine life,you are destroying life.This sonar testing is more dangerous than good...please stop!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
B. Doyle (Electronic)	I have recently read about the Navy's plan to use sonar testing which will damage hearing on whales and dolphins which will result in a slow lingering death to whales and dolphins whose existence now is hanging by a thread, a thread which connects all of us. We humans have done so much damage to this beautiful planet. The creatures on this planet are to be revered and respected and yet we continue on with species disappearing on a daily basis. What is going to be left for future generations? Why do you need to test battle equipment when we are not at war, except a war in which the creatures and the environment on this planet struggle to survive in spite of damage caused by man to the environment. Every time a military "test" is conducted, every time a gun is made, every time a warship is launched, every time a rocket is fired steals from real things needed on this planet, including the whales and the dolphins you seek to destroy. Furthermore you are not spending and wasting just money and destroying endangered species, you are spending the work of people who should otherwise be helping this planet, you are taking the genius of its scientists who should be finding ways to save the environment and you are taking away the hopes of its children who should be able to see beautiful things in the world. Further as a taxpayer, and as someone who pays your salary and benefits and healthcare and pension and retirement and who also pays for the equipment you use and as someone who works 2 jobs to do so and as someone who cares about the environment, I am requesting a written response from you as to why this testing is being done and as to why these animals mean so little.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
E. Doyle (Electronic)	I fail to see the long-term term benefit of endangering a species that are already under a great deal of pressure. I urge you to reconsider.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Dozier (Electronic)	I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree by taking certain steps. These steps include avoiding the most	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Drake (Electronic)	This should have been stopped long ago.	Thank you for participating in the NEPA process.
Dressin (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Aaron Dressin	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Duggan-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities., . Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Duggan-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Duncan (Electronic)	I am very concerned about the impact your testing will have on our precious marine mammals. There is so much destruction and toxicity already in our oceans. Please reconsider and make the best choice for all of life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Dux (Written)	I find it an insult that the Navy should use the word "Green" or insinuate that it is such to boost its tarnished image. We are all aware of the damage this branch of the military has done to the Environment. No amount of cardboard colored pictures can undue that knowledge! Your "War Games" are an assault to this wonderful Earth. I challenge you to cease and desist your activities in our oceans and work towards a sustainable Peace to the Planet. If you find these words strong it is because your presence on Kauai waters and elsewhere have inflicted much harm to life there.	Thank you for participating in the NEPA process.
Eaise- (Electronic)	I am writing to ask that the Navy protect marine animals from explosives and sonar along the east coasts and California/ Hawaii coasts. Please rethink your plans and incorporate protective measures for marinelife. I thank you! Ms. Florence Eaise	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Eaton (Electronic)	Sonar and radar impact the whales and dolphins in a harmful way. Please discontinue testing in their waters.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ebert (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, sophie ebert	(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ebrahimian-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ebrahimian-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Eck (Electronic)	Please think about what you are doing before you act. Much of the marine life will be needlessly destroyed if you proceed with these tests. Surely with your advanced technology you could find less destructive means to make your target. I ask that you please put an end to these training tactics and keep our ocean life safe the same way you keep this country safe.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Currently sonar is the best means of locating small objects in the water The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
A. Edwards (Electronic)	Please do as little testing as possible that would harm the marine life...dolphins and whales, etc. We appreciate your exercises to keep America safe! But also don't want to harm marine life!!! THANK YOU!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Edwards (Electronic)	I am a gainfully employed citizen who has served in the United States Military. I am not a 'tree-hugger', or some wild-eyed lefty. I believe in having a robust military that is capable of defending our country. However, the routine sacrificing of so many marine mammals in the name of national defense is unacceptable. These are intelligent animals, and are a vital part of our marine ecosystem. We, as humans, can figure out alternative methods to meet our security needs….. we are better than this. Respectfully, David Edwards San Diego, CA	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Elise (Electronic)	"NO SONAR IN OR NEAR HAWAII, NO SONAR IN OR NEAR CALIFORNIA, NO SONAR IN THE PACIFIC OCEAN, NO SONAR AT ALL! STOP!!!!!!!!!!!!!!! IT TORTURES AND KILLS WHALES AND DOLPHINS!!! dO YOU REALLY WANT THIS???	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Engert (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals of the planned training exercises. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that extraordinary numbers of whales, dolphins, and porpoises might be harmed or killed. Please re-think the training exercise plans as they are currently proposed and incorporate additional protective measures. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Engh (Electronic)	I concur with John Flynn: I too am saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. Please give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. I look forward to hearing from you with your views on the	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	above. Sincerely Yours, Maureen Engh	activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ephigene-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ephigene-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Epperson (Electronic)	Is it true that our Navy's use of high frequency underwater sound for testing in Hawaii, the California and Atlantic Coasts, and the Gulf of Mexico could deafen 15,900 whales and dolphins and kill 1,800 more? If yes, I petition that the Navy stop this program. Thank you, Kathleen	See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any model that is meant to predict future takes on marine mammals is only an estimate.
Amanda Evans (Electronic)	It is utterly inconceivable to me how backward, inhumane and sociopathic the Americans can be when it comes to their defense forces. You cut the legs off live goats, train and kill dolphins and dogs and now you propose to wipe out millions of marine mammals for some testing. GET OVER YOURSELVES. This is not your planet to destroy. One day in history people will observe you and your actions and they will be horrified by how blinkered and backward a society you are. It is inconceivable to me that a government would even allow such a violent and destructive training practice to ensue. I will circulate this story on my blog, facebook and all over the internet if this really goes through. People in the world are waking up to you and your dastardly acts. This is an opportunity to do the right thing - DO IT. Amanda Evans	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Amy Evans (Electronic)	You need to re-thing your testing ideas and consider the thousands of helpless mammals you are going to injure and kill. What about considering the environment and the animals in it that we continue to distory every single day. The Navy should go back to the drawing board and think about what impact its having on the world in which we live in; the world that is not going to exist for long if we continue are distructive human ways.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	As an American citizen who pays taxes, I strongly urge you to stop this and please reconsider the very harmfu actions you are about to take.	(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Evans-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Evans-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
E. Evans-01 (Electronic)	The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. THIS IS NOT EXCEPTABLE! The careless project would not just kill a few already ENDANGERED marine mammals but thousands! What will there be left?? The environmental impact would be devastating!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		the Navy has recorded few to no mortalities from sonar or explosives. Any model that is meant to predict future takes on marine mammals is only an estimate.
E. Evans-02	This not only affects all ocean animals but humans as well! Not only do oil spills and Asian countries such as China and Japan hunt hundreds of whales and dolphins and other marine mammals. But THE UNITED STATES OF AMERICA is posing a threat worse??? The navy is a brave organization and does many things for our country but this new proposed plan and the effects it will create is just wrong!! I thought we were smarter and more civilized them that! America wants to help the earth not destroy it! That's what makes out country great! We take into consideration things other countries don't! Well this proposed act is NOT doing anything to help the country but destroy part of the planet EVERYONE shares!!! God made this planet all the animals, the enviorment the fish in the sea Everything! It's not meant to be risked or be destroyed. We are smarter then that! I pray this act gets overturned! People who swim in the water will be exposed to the harmful effects as well! The fish that humans eat from the ocean will be contaminated with radiation as well leading humans to be internally affected!!This new project is not a far cry from the numerous atom bomb tests in the 50's. Except it will permantly damage much more! PLEASE PLEASE consider differant options for this project! All of us share the planet animals and humans! Please help it to be better for the future!!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy used the best available science and a comprehensive review of past, present and reasonably foreseeable actions to develop a robust Cumulative Impacts analysis. See Chapter 4 of the EIS/OEIS.
K. Evans (Electronic)	THIS IS SO DISRESPECTFUL TO THE BASIC RIGHTS OF THE OCEAN, AND THE INHABITANTS OF THE OCEAN, AND THEREFORE ALL LIVING THINGS BECAUSE WE ARE ALL CONNECTED AS ONE LIVING EARTH. FOR GOD'S SAKE, PLEASE STOP THIS INHUMANE BEHAVIOR/PROCEDURE!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Fain (Electronic)	I can appreciate how live testing is a better form of training, but the detrimental consequences to marine and mammal life are so great I am against this training and testing program. Sincerely, Marla Fain	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Fallon-01 (Electronic)	I find it appalling and deeply disturbing that this level of damage to marine creatures is being contemplated. There must be some way, or hopefully many ways, to reduce these terrible consequences.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Fanizza-01 (Electronic)	Unbelievable,that our own Navy would cause such pain and death for our marine mammals. You must stop!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Farhadi-01	When I heard about the U.S. Navy's Environmental Impact for training and testing in the ocean around Hawaii and California during the next five years I was shocked. I wish to	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	be added to the petition to stop such activity. Thank you!	Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Fergerstrom (Oral-Hilo)	Please excuse me. I am grossly unprepared for this. I did not even know of this meeting or that the process had gone this far until yesterday afternoon. One of my major concerns is, is that I've been involved with the military buildup here in the islands. Aloha. My name is Hanalei Fergerstrom. I am a spokesman for Na Kupuna Moku O Keawe, which encompasses all six major districts of the island of Hawaii. So for those of you who do not know, this is the council of the elders. I'm also a haumana of the Heiau O Lono. This is a religious organization (inaudible). Anyway, I have been involved with the military buildup here for over 12 years. I was involved with the low sonar frequency testing that was done here, I believe, about 12 years ago. I actually filed suit against the Navy. During that time, my suit was denied because it was basically moot. You were just pulling out of Hawaii. But I am on your mailing list, so I am very shocked that this has gone this far and I have not been provided with information. As you know, information is critical for a proper response. I have been working with different branches. I've spent the last two years working with the Army on the Pohakuloa buildup, which is actually coupled with this in some fashion or form. Again I'm a little bit outraged because I do not have this information. I am grossly unprepared, but I have to try to do something. I have been successful in getting myself on the mailing list. People are aware of me. I've been promised a hard copy because I need the hard copy to make a proper response by your July 10th deadline. Of course when I looked at your timeline, this has been going on for quite some time, and if I had had this information from the start, perhaps I would not feel so intimidated and overwhelmed. One of the things that is extremely important to add into this fray of things is that the environment includes me. I am a part of this environment. The Hawaiian people, the Hawaiian Islands are part of this environment. It is not just the ocean. Secondly, because a lot of this testing that is going to be done or this project that is going to be deployed is going to be done in large part in international waters, and when you talk about in the EIS, it affects many countries -- and I refer to subjects such as RIMPAC -- that other countries also need to be informed of where you are and participate in the EIS process because it affects all the Pacific region. Sorry. You threw me off with that one-minute thing. Please don't hold me to that. As long as we make sure, I'd like to utilize the time. Again I am grossly unprepared. I did not find out about this meeting until last evening. And interestingly enough I went to the Pacific Command to try to get some information, and Google cited it as an unsafe link. That's something that you should be aware of. As I said 12 years ago, the kohola and the nai'a that are the most impacted that have been most frequently (inaudible) are not just large fish. They are my family, my blood, my blood, which can be established through the Kumulipo, the Hawaiian creation chant. I am also a Hiapo Na Koa O Pu'ukohola, or the Warriors from the Mound of the Whale. So we are very familiar with this. We are very,	The Navy shares your desire to preserve marine life. The Navy believes that the proposed training will not pose a risk to marine mammals, fish, and other wildlife given that these same activities have been conducted for many years in this Study Area and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. The Navy is not aware of any documented cases of sonar harming people.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	very concerned that a whole lot of things are not being considered. You refer to the larger species of mammals like the porpoises and the whales, but we are island people, and so the effect on smaller fish and the crustaceans and how it affects -- Okay. So you see the problem we have here, not being able to talk about this because how can you possibly do this if you're constantly cut off after three minutes? Thank you, and I want to register my objection. Thank you.	
Ferry (Electronic)	I am in the UK - I volunteer for a charity which rescues stranded marine mammals. Have you ever seen a whale up close, & tried to help him survive? No, I think not. All animals are precious, as humans we are responsible for caring for them & protecting them, not continually destroying them & their habitats. You should be ashamed this activity is even being considered. You need to rethink your plans, with immediate effect.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Firestone (Electronic)	Please do not do this! These beautiful animals have a right to live in their ocean without being killed or deafened by YOUR TESTING. This is their home, not yours.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Fischer (Electronic)	Please do not allow any marine life to be damaged in any way by any training, testing, or drills of any kind. I am very pleased to see that the Navy does have a program in place to protect marine life. My sincere hope is that this program is implemented and carried out with the highest standards of integrity,and that integrity will be unfaltering. Marine mammals are threatened in so many ways at this time. We must all protect these species from any further abuse. I thank the Navy for stepping up to the plate, and responding with a program to protect these precious creatures. Most Sincerely, Antoinette Fischer Wife of a Wartime Navy Veteran	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Fisher (Electronic)	Please cease and desist and do not further plan to test explosives and utilize sonar and other devices which will disrupt and harm Marine life, particularly cetaceans.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
S. Fisher (Electronic)	Please DO NOT conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. There is no need for the use of live explosives and high-intensity sonar that kills our ocean life. They have just as much right to live freely without threat as all the humans of the earth.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Fitting-Gifford (Oral-Kauai)	I haven't had the opportunity to read your draft environmental impact statement in completeness, but I did notice one particular little item. And I hope that the rest of the report was not done with as much brevity and lack of concern as this one. It's on page 13, and it's about social economics. And it reads, Impacts from the proposed action on social economic resources would be short term and temporary and, therefore, negligible. If we look back over the economic impact of having the military here in Hawaii since 1940, later, during my lifetime at any rate; I think that we find that the social economic impact is tremendous. The report talks about the practice in bringing people out here to serve and giving them practice in different techniques on the way out. But they don't say anything about taking them back. And our habit has been here that when someone comes to Hawaii and loves our country as much I do, that they don't want to go home. And one of the impacts, the long-range impacts, is certainly the governor's and the state deciding that we should take a thousand acres of our farmland on Oahu and turn it into houses for people to live in. Clearly the military has contributed significantly to the demand for homes on Oahu, if not here on Kauai as well. Hence, I would like to see in particular this item expanded and some of the ramifications of our social economic policies as far as the military goes in terms of permanence be considered more fully. Thank you.	The Hawaii-Southern California Training and Testing EIS/OEIS Proposed Action does not include any actions that result in individuals being based permanently in the Study Area; therefore, no analysis of the economic impact of real estate is warranted. Other socioeconomic issues are described in Section 3.11 (Socioeconomics) of the EIS/OEIS.
Flagg (Electronic)	I support the following statement by Dr.Gans: There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Patricia B Gans MD	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Folman (Electronic)	Please stop the abuse of marine mammals through the U.S. Navy !!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Ford (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. PLEASE protect marine mammals from explosives and sonar!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any model that is meant to predict future takes on marine mammals is only an estimate.
Forst (Electronic)	Hi, What is the Navy doing to animals off the coasts of California and Hawaii? Please think of them before you start. Thanks, Fran	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Forsythe	Please incorporate additional protective measures to protect the dolphins and other marine mammals, please consider them . What a horrible painful death they suffer .	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	Being The United States Pacific Fleet of the U. S. Navy, i feel that it is your duty to protect all creatures God has created. After all it is their home that was created for them ,that you encroach upon exposeing them to danger .Thank you for taking the time to read this comment. I `m counting on you to do everything that can be done to protect our marine mammals .	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Denise Foster (Electronic)	I am here to raise my voice for those who can not speak for themselves to STOP the US Navy's War Technology and War Game Expansion that is directed to destroy all Sea Life & Marine Mammals!! There is NO need to "test" ANYTHING with sonar! YOU ARE KILLING MINDS OF THE OCEANS!! I'm sure you wouldn't like it! WHY DO IT TO THEM?!! PLEASE STOP ALREADY! ENOUGH IS ENOUGH!!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
David Foster (Electronic)	I understand national security, but is the risk that great that our Navy has to bang its sonar so loud that it disorients and damages the creatures in the sea? I work with a former sailor and he thinks not. Yes, he's just one and I am just one, but collectively we are all. What is done must be done for the good of all. I am not convinced that these "war games" and sonar tests are necessary due to such a great threat. Do we really have an enemy what will attack us from the sea? The enemy can get to us without that and proved it on 9/11/01. Do we really have intentions of attacking another country? There is no winner in war. If we destroy the sea life, we destroy ourselves. Man must evolve and stop leading us all to extinction. We don't inhabit this planet. We are an integral part of the Earth life system. I would hope that the one that claims to be the most intelligent species on the planet would not responsible for destroying it. Sincerely, David J. Foster	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Currently, sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Peter Foster (Written)	Opposed.	Thank you for participating in the NEPA process.
Fox (Electronic)	Please mitigate and reduce the impact of sonar and explosives testing on dolphins and whales. These are intelligent creatures whom we, as the superior species on the planet, are charged to protect over the long haul. We must protect them! I recognize the need for military testing but the protection of the environment and sea life must be a priority too. We are all on this planet together. Do you want dolphins and whales to be here 500 or 1,000 years from now for example for our descendants to enjoy and interact with? I certainly do. So we must shepherd them carefully now.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Franco (Electronic)	I live on the ocean, my work involves photographing and documenting any cetaceans I come in contact with off the Western Coast of Oahu. The idea that we are injuring the animals we learned Sonar from simply befuddles me. I've read the reports and done my research and am still opposed to this proposal.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Free (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Freehill (Electronic)	This comment is about the Navy Sonar Warfare Testing program in the Pacific. There is ever increasing evidence and clear indication that simply turning off sonar tests when marine mammals are visually spotted is not sufficient to protect them from serious injury and death resulting from these tests. This testing is devastating to vast numbers of marine mammals. Knowing this, I can only implore those reviewing this practice to immediately STOP these tests. They are injuring and killing precious and defenseless marine mammals. I refer you to NRDC article documenting this "staggering" and severe harm here: http://www.nrdc.org/wildlife/marine/sonar.asp and here:	The Navy shares your concern for marine life. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 of the Draft EIS/OEIS. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	http://switchboard.nrdc.org/blogs/zsmith/harm_of_staggering_proportions.html The WASHINGTON POST stated that: (Associated Press) May 11, 2012 – "New Navy study says use of sonar, explosives may hurt more marine mammals than once thought "…HONOLULU-The U.S. Navy may hurt more dolphins and whales by using sonar and explosives in Hawaii and California under a more thorough analysis that reflects new research and covers naval activities in a wider area than previous studies…" "The Navy estimates its use of explosives and sonar may unintentionally cause more than 1,600 instances of hearing loss or other injury to marine mammals each year, according to a draft environmental impact statement that covers training and testing planned from 2014 to 2019. The Navy calculates the explosives could potentially kill more than 200 marine mammals a year" Please tell us how, with this brutally painful injury imminent and clearly KNOWN, the Navy can continue this destructive warfare testing? "Mass dolphin deaths in Peru caused by acoustic trauma" were announced by "…Dr. Carlos Yaipen Llanos of ORCA in Peru informed Hardy Jones of Blue Voice that acoustical trauma is the cause of the Mass Mortality Event (MME) that killed an estimated one thousand dolphins along the coast of northern Peru in March 2012…". Digital Journal News Report – "Mass Dolphin Deaths in Peru Caused by Acoustic Trauma" May 17, 2012 - Read more: http://www.digitaljournal.com/print/article/325075#ixzz1vnKmJkGL http://www.digitaljournal.com/print/article/325075 This is another reason to begin to limit sonar, laser, radar, and electromagnetic weapons testing in the Atlantic, Pacific, and the Gulf of Mexico. Some more documentation here about the connection between tests and MARINE MAMMAL STRANDINGS ASSOCIATED WITH U.S. NAVY SONAR ACTIVITIES April 2012: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/Marine%20Mammal_Stranding_Report_v02.pdf Thank you for your attention and serious consideration of this comment & grave matter. May true honest intelligence & moral compassion guide your decisions in this matter.	sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Freeland (Electronic)	Thank you for taking the time to read this letter and authentically consider its message. And thank you for the in depth assessment the Navy has produced in its EIS report regarding the impact of sonar weapons testing on marine mammals and seabirds in the Pacific region. My father served in the Navy in the Korean war and I am grateful to those who serve in the Navy for any contributions they have made to make the world a better place. However, when it comes to the issue of underwater sonar testing which include underwater detonations, explosions and high frequency sonar blasts, I have to voice my opposition. Who will defend the defenseless sea creatures and eco systems of the ocean from these violent disruptions? As stated in the Navy assessment, many deaths of dolphins, whales, and other marine mammals will result from escalated sonar testing, as well as lung and gi tract damage and traumatic stress. This level of stress will affect mating and the robust propagation of these species. In your assessment, however, you did not calculate the toll of human suffering. When large numbers of deaths and declining populations of of these majestic marine mammals occur, consider the psychological suffering it will incur on people who love God's creatures. There is a highly evolved level of communication and empathy between humans and the dolphins and whales. If the tax dollars of millions of Americans continue to be used to fund weapons systems that aggressively and violently disrupt the eco system of the ocean, it could result in a domino effect of population decline and down the road, possible extinction, of these vulnerable populations of marine mammals and other sea creatures. If this occurs,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	all humanity will suffer a profound loss. To ponder the loss of these majestic marine mammals tears at the very fabric of how humans make sense of the meaning of life. If being alive as a human being on this planet means that we helplessly participate in the perpetuation of endless conflicts, ceaselessly manufacturing weapons of destruction to blow up underwater, overwater, in the air and everywhere we can manage to explode something, with the end result of polluting and destroying the very air, water, food and shelter that we depend on for life ...then why even be here at all? Is this how God intended for human beings to "steward" His precious creation? Just reading the Navy report on projected mortality rates, damage to the lungs and gi tracts and traumatic stress to dolphins, whales and monk seals, actually makes me physically ill. We live in Hawaii where the economy is driven almost exclusively by tourism. Can you imagine dying dolphins washing ashore on Waikiki beach witnessed by hundreds of shocked visitors? Can you imagine hundreds of live videos being beamed instantly around the world showing people the world over this tragedy? Can you imagine what may happen if people realize they have been paying the government 60% of their tax dollars over a lifetime of dutiful IRS contributions - to fund this insanity? It's not humane, it's not necessary, it's not right, it's not pono. It's a nightmare. The dolphins, whales, monk seals, turtles - they are a part of my family. You are using my money to kill my own family. That is an outrage. The US spends more money on "defense" than 60 major countries combined. We see that our government is building up a military presence in the Pacific. We see that the Navy is planning on escalating the sonar testing three fold. I am a Hawaii resident. I don't want the Navy to continue to detonate explosives in the ocean waters surrounding the Hawaiian islands. I don't need that to happen in order to feel safe, secure or protected. As a matter of fact, underwater military explosions and sonic blasts create the opposite feeling - that the ocean is no longer a safe place to fish and to swim, that the very balance of the oceanic realm is being violently disturbed and that makes me feel personally violated. I want the killing to stop, I want the destruction of the ocean to stop. I want this madness to end. No more detonations, explosions, drilling, mountaintop removal, poisoning and polluting. It must stop. If we have any interest at all in leaving behind a world worth living in for our children's children and beyond. We must shift our global attitude from "Every man for himself" to "We're all in this together". Again, in regard to the continuation and escalation of Navy sonar weapons testing in the Pacific ocean, I am appalled at how my tax dollars are being used. It implicates me and every other tax paying American in the destruction of the planet and the killing of defenseless marine mammals. Respectfully, Candace Freeland Kapaa, Kauai, HI 96746	
Freeman (Electronic)	As a concerned voting citizen, I strongly wish to register my wishes that no, repeat NO, whales, dolphins or fish be injured, impacted or killed by any actions of the US Navy or other military groups. Thank you!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Freitas (Electronic)	To whom it may concern, Almost everybody agrees that we need a robust and strong Navy to protect national security. And almost all of us agree that whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Pleaser consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please re-think your plans and incorporate additional protective measures. Thank you. Sincerely, Tatiana Freitas	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
French (Electronic)	You can't be serious about the sonar testing being a good thing?! Really??? DON'T DO IT!!!! Being a monster is not cool.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		decade. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Fuchs (Electronic)	No sonar in Hawaii or near Hawaii - this is a sanctuary and needs to be protected and RESPECTED - even by the Navy. Sonar kills!!!! and it kills the innocent, wahles, dolhins, turtles, fish, monk seals and the ocean - haven't you done enough damage to the oceans yet??? how come you ignore life that much???? STOP IT!!!!!!!!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Furukawa (Electronic)	Please utilize methods to ensure national security without sacrificing the lives of so many marine creatures (some that are endangered) and without causing permanent damage and suffering to thousands of others. How about safety zones? Avoiding seasonal feeding areas and calving areas? Take time to research the areas before moving forward. “The greatness of a nation and its moral progress can be judged by the way its animals are treated”- Gandhi	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Futral (Electronic)	I understand that for safety & security purposes ship hulls need to be tested for strength. However, believe if we can send men to the moon & can have humans orbit our planet on a space station, we can find a way to test ships without causing harm to the ocean-life we've not yet exterminated. I'm from a NASA town & grew up in a NASA family so I know our government has the know-how. Perhaps funding could be diverted from the testing to find out why monkeys fling their poop. Don't laugh, this is listed as a current legitimate budget expense of our government. We can't keep killing off these amazing creatures in our [*Incomplete comment presented as submitted.]*	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Gaalaas (Electronic)	Please consider modifying your training methods to avoid injuring/ killing marine mammals in the Calif and Hawaii waters.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gallegos (Electronic)	Stop the Naval exercises which would do great harm to marine life living in the waters where the U.S. Navy proposes to experiment. These exercises would causes permanent or temporary damage to animals' hearing and lung damage to the marine life. The marine life in the proposed area deserve to live undisturbed by human contamination. Much work has been done to conserve the species and endangered species, such as the right whale, would be affected. Why does the Navy ignore the fact that all life is reliant upon one other? We are many species of creatures that make up our earth. Being a good steward of this earth is our first responsibility. Harming marine life does not uphold this practice.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Garman (Electronic)	I beg of you to please consider some other way of testing this equipment that will be harmful to delicate marine life that is under siege by so many other environmental hazards. Surely your scientists can find a method of testing that will not cause pain and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	death to our fellow creatures.	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Garner (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gawboy (Electronic)	Hello U.S. Navy, I will comment on your plans to expand on the 5 - year Warfare range in the oceans surrounding the United States of America. I have read a tremendous amount of information on the subject, and I have attended a meeting with representatives from the Navy talking to the public at the Wharfinger building in Eureka, California. I met someone who saw the whale that traveled up the Klamath river that later died there. We know that the sonar testing is hurting the cetaceans in large numbers and this is unacceptable to me and many others. We know that a lot of the bombs that are tested and even ship cleaning procedures pour toxins into the ocean. Maybe some people think the ocean is big enough and can take it. But we know that there are now huge dead zones forming in the ocean. We eat fish from the ocean and they are becoming more toxic due to many things including pollution from the Navy. I know that even the oceans have a finite ability to take our abuse and keep the wildlife thriving. There are other ways to protect this nation besides more bomb and sonar testing. One is to actively developing peaceful, fair, and just relations with other nations. We need to be spending more money on communicating, and rearranging our priorities so we do not have such fearful "enemies". We are smart enough as a people to do this. We are aware that there are some corporations that make a lot of money selling weapons and when they are used by testing, more have to be made and sold. I am saying that the motive for polluting our oceans, damaging our wildlife, and threatening the health of our people may not be based on our protection, it may be based on greed. I do not fear these other nations, more than I fear the system that allows you to pollute and harm us so severely. So I am asking you to create a new policy, that will instead protect our oceans and in turn the health of the people of our nation. Like I said before, we need to make a concerted effort to make peace, that is the best defense. I understand that some people are not ready for peace and we still need a military that is well trained. I have faith that we can protect ourselves without escalating our use of weapons. The other point is that if we keep testing at this rate, there will be no nation left to protect. So you just need to come up with healthy alternatives to protecting this land, sea and nation. Give us a chance to restore the health of our surroundings. That would be the best defense. Thank you, Stephanie Gawboy P.O. Box 871 Redway, CA 95560	The Navy is not proposing to expand the areas in which it conducts training and testing. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Geddes (Oral-Kauai)	My comment was somewhat the same because I go halfway to the bank. So it's a 13-hour run and 13 hours back. And so the ops, I get a hold of some of my buddies on the base, yeah. And they let me know. But if there was an easier way because sometimes it's hard to get ahold, and then the schedule gets changed, and we get kicked out. We got to go 80 miles south, and then we get ahold of da kine Honolulu Coast Guard then maybe day, day and a half, and so a couple days where we no can fish 'cause, you	Navy training and testing activities have the potential to temporarily limit access to areas of the ocean for a variety of human activities associated with commercial transportation and shipping, commercial recreation and fishing, subsistence use, and tourism in the Study Area. As discussed in Section 3.12.2.1.1 (Sea Space) of the Draft EIS/OEIS, when training or testing activities are scheduled that require specific

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	know, so it's a mile and a half deep. And halfway bank, you know, it's all about the up, you know, the up, the shallows. And so yeah, just give us a better, some way to know your scheduling of your practices. One other comment. Please don't get mad. A lot of you folks, you know, you plenty compassion for the animals, and I understand that. But I don't know if you ever done outreaches Cambodia, Vietnam. I'm a Vietnam vet, and so I did other things after that and have the heart for the people, you know, because 99 percent of the world is starving. It's all about where the next job is come from because no can afford their rice. And just remember the people, too.	areas to be free of nonparticipating vessels due to public safety concerns, the Navy requests that the U.S. Coast Guard issue Notices to Mariners to warn the public of upcoming Navy activities. Training and testing activities occur in established restricted or danger areas as published on navigation charts.
George (Electronic)	Please protect marine mammals from explosives and sonar. Please consider steps to reduce the harmful impacts to marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Georgi (Electronic)	(1) Noticed one typo on page 365 of volume 2. The name of the port on Kauai is Nawiliwili, not Hawiliwili. (2) Other than that, the EIS is reasonably thorough, and alternative 2 represents a good balance of protecting our national security interests versus endangered species, etc. (3) In the past, I worked at PMRF for 16 years and saw major exercises delayed (once for 2 days!) because marine mammals (whales) were in the operations area. (4) The Navy tries to stay 1,000 yards away from marine mammals. If a skipper gets too close, it can end his/her career. On the other hand, whale watching vessels are allowed to approach to 100 yards of whales...and if they get closer, the crew may get bigger tips! The encouragement of whale watching is far more dangerous to the whales than the proposed Navy actions under the EIS!	Thank you for your comment. The error you pointed out has been corrected.
Germano	Opposed. Stop what you are doing. You have no respect for the ocean. Hawaii is a	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Written)	natural country. You military forces yourself on our country. We do not need you to destroy the life of our air and ocean. The only one that want war is you. This ocean belong to those whom love Mother Nature.	
Gherini (Electronic)	Please don't do this. These creatures are part of California and America's population, and I cannot proudly say im an American and let this happen.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gibson (Oral-Hilo)	I'm Inga Gibson. I'm the Hawaii State Director with the Humane Society, United States. We will be submitting formal written comments, but I wanted to make a few comments for the record, if I may. We are very concerned, obviously, with the potential impacts on marine mammals and other animals in the Pacific and Hawaii. We're especially concerned about the potential permanent and temporary hearing loss, lung injuries, gastrointestinal injuries, and death. We understand that there's no presentation or analysis of alternatives at this time that would in any way significantly reduce the unprecedented impacts and level of harm to these marine animals, many of which are protected under both the MMPA and the SMR, or in some cases are critically endangered, such as the Hawaiian monk seal. We are concerned with the Navy's mitigation scheme, centered on the ability of lookouts for whales and dolphins, and do not believe that it will result in an appreciative decrease in marine mammal take. Furthermore, we are concerned that the Navy appears to dismiss what is acknowledged to be the most effective means to reduce marine mammal take and avoiding areas associated with high marine mammal density. That, again, is what we would like to see, is an avoidance and a better scheme in avoiding altogether some of the areas where there is strong marine mammal presence. We also encourage the	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Navy in their continued efforts to be seen as an effective steward of the ocean environment to take steps to significantly reduce the level of harm in training and testing activities. Again, we'll be submitting formal more detailed written comments. There is also concern about the significant increase in the proposed takes under the new DEIS from the prior EIS and the numbers of animals potentially impacted. Also a concern with the verification of take, and the methods used to verify take, if that is even verified. Again, thank you for this opportunity.	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ginsbach (Electronic)	How does a human mind get to the point where this type of deadly testing would even be considered?? You guys must be well on the way to the crazy house if you go through with killing all these innocent sea mammals. There are always other methods available to do this research.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gitzel (Electronic)	Please, please, for the mercy of the living creatures who reside in the ocean STOP THE UNDERWATER SONAR/SOUND TESTING. The US military is without question, the strongest, most advanced military on our great blue planet. It is now time for our great military to make its future technical advances in humane ways. As a future resident of Hawaii, I speak out for the whales and dolphins who cannot be heard but who CAN HEAR YOU. They are suffering greatly from the effects of underwater sonar. Dolphins and whales use sonar not only to navigate, but to communicate with each other. Our sonar testing, much louder than their own voices, drowns out their own calls, destroys their hearing, and can lead to loss of life. Please, please be conscious of how sonar testing affects them and cease this practice. We can use our technical prowess to create lab environments to test our equipment. Thank you sincerely for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gobioff (Electronic)	It is outrageous any action would be taken that would put whales and dolphins in harms way	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Godin (Electronic)	I am writing to voice my concern for the marine life so negatively affected by the sonar testing being done by the US Navy. I strongly object to thIs manner of testing. Every effort should be made to make sure that this practice is halted. The ocean life whose home is invaded and whose livlihood is jeopardized are creatures of the Earth like you and I. If anyone bombed the US, killing and maiming American people, and impairing our ability to obtain food, surely the US Navy would be sent forth to protect and aid the people. Marine lives depeNd on US to speak up for them... No whales will come from the ocean to wrong Navy testers in the way they have been wronged but that merely makes them vulnerable & defenseless - not expendable. Use those sonic testing apparatuses to locate your hearts, please!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Goden	I hope that the concerns of many regarding this sonar testing find their way to listening ears, dEspite any troubles encountered while submitting this form...	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Gold (Electronic)	Please, for the love of G-d, stop the underwater sonar-sound testing. It is a cruel practice that destroys the quality of life of our dolphins and whales, who have no voice and no choice to protest this assault on their lives. It destroys their hearing, which in turn makes	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	it impossible for them to communicate with each other, something essential to their survival. I beg you to take this into consideration. Thank you, Talia Gold	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Goldman (Electronic)	Stop any and all of this abuse to the animal's the only thing your doing is wasting tax payers money that could be used to teach and help find the veterans jobs and schooling	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Goldsmith (Electronic)	Cetaceans have been described as "non human persons" by scientists...this is extremely distressing and disgusting for me. Please cease this program!	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Goldwyn (Electronic)	I'm appalled to hear about the proposed testing because of the impact it will evidently have on the hearing and very lives of so many precious whales and dolphins. It's hard to believe that the extensive damage to these mammals is worth the benefits gained from the testing. PLEASE... do not proceed with this testing. Thank you very much. Lori Goldwyn	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gomez	Opposed.	Thank you for participating in the NEPA process.
Gonzalez (Electronic)	Stop the testing now! You are hurting and killing countless animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Goodwin-01 (Electronic)	Of course, the marine ecosystem would be best served if the Navy cancelled this exercise. That decision makers conclude that there are overriding consideration is a topic for another venue: Is it possible to simultaneously prepare for war and prevent war? The Navy and NMFS by admission don't understand the current level of health of the eastern Pacific basin ecosystem and are guessing at the impacts of this exercise. For a scientifically correct and ethical study there must be research and data collection to establish a baseline against which future studies can be measured.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy has used the best available science in the development of this EIS/OEIS.
Goodwin-02	The Navy needs to be more aggressive in publicizing the scoping sessions to promote community awareness and participation. An item on the back pages of one newspaper is insufficient when there are many media, government and civic organizations that can get the word out. The Nay plans only one scoping session on the west coast, in San Diego. They should occur in communities north through California and Oregon where impacts from the exercise may be felt.	NEPA requires federal agencies to provide opportunities for meaningful public involvement. For this EIS/OEIS several opportunities have been afforded the public to become involved beginning with the 60-day scoping period that commenced with the publication of a Notice of Intent to prepare an EIS/OEIS in the Federal Register on July 15, 2010. Advertisements were also published in local newspapers. During the scoping period, six public meetings were held where Navy staff members were available to answer questions and take comments from the public. In addition to holding scoping meetings, the Navy made significant efforts to notify the public to ensure maximum public participation during the scoping process, including the distribution of stakeholder notification letters, postcard mailers, press releases, and newspaper display advertisements. The release of the Draft EIS/OEIS initiated a 60-day public review period. The Navy announced five public meetings in the Federal Register and local newspapers. These public meetings provided members of the public opportunities to learn about the proposed action and its potential environmental impacts and comment on the Draft EIS/OEIS. The public was also offered the opportunity to comment on the Draft EIS/OEIS via an internet web site and via the U.S. Mail. Comments received during the scoping period were considered in the development of the Draft EIS/OEIS. Comments received on the Draft EIS/OEIS have been considered in the development of this Final EIS/OEIS.
Goodwin-03	Because the proposed exercise is more intense in its use of sonar and explosives than anything before attempted, the Navy should instead maximize computer simulation practices to mitigate harm. The Navy should conduct minimal as possible exercises as far from marine habitat, especially habitat of endangered species, as is possible.	As described in Section 2.5.1.3 (Simulated Training and Testing), the Navy currently uses computer simulation for training and testing whenever possible. Computer simulation can provide familiarity and complement live training; however, it cannot provide the fidelity and level of training necessary to prepare naval forces for deployment. The Navy is required by law to operationally test major platforms,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		systems, and components of these platforms and systems in realistic combat conditions before full-scale production can occur. Substituting simulation for live training and testing fails to meet the purpose of and need for the Proposed Action and therefore was eliminated from consideration as a mitigation measure.
Goodwin (Written)	I'm appalled to hear about the proposed testing because of the impact it will evidently have on the hearing and very lives of so many precious whales and dolphins. It's hard to believe that the extensive damage to these mammals is worth the benefits gained from the testing. PLEASE... do not proceed with this testing. Thank you very much. Lori Goldwyn	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Goslow-Zwicker (Electronic)	Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Sincerely, Annemarie Goslow-Zwicker	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. . Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Govea (Electronic)	Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Rio Govea	. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Graham (Electronic)	Please do not kill living creatures in order to protect living creatures. Surely the intelligent human mind can come up with a better plan to perform your tests and not maim and kill the intelligent beings of the sea.	. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Grant (Electronic)	How will destabilizing an ocean ecosystem by deafening or killing marine mammals contribute to our security? If we cause the collapse of our fisheries with the resultant loss of jobs and food sources, how are we safer? It's already well established that the fisheries off our coasts are strained and nearing depletion. This exercise will only hasten this demise. It's time to step back and really analyze how we defend ourselves and our	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	coasts without harming the ocean ecosystem.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy has conducted training in these operating areas regularly for approximately 60 years. Though the intensity of live training will increase, the events are of relatively short duration and therefore the Navy does not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear mid- and high-frequency sound sources which make up the majority of sound producing activities.
Gray (Electronic)	I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historic records from the Navy show few to no mortalities from sonar or explosives. Any model used to predict numbers of animals affected is only an estimate.
Greenwood (Electronic)	As a concerned citizen, educator, ocean & environmental health instructor, I feel compelled to address your ongoing assault on our ocean's health and the well being of all sea life. I feel equally perplexed at your decision to double warfare training exercises for a 5 year period and your aggression toward our oceans. Just who or what are we at war with? Whales? Seals? Fish? Dumping countless tons of toxic chemicals into her waters, and killing whatever life might get in your way just does not humanly make any sense. Enough is enough. When will the military ever figure that out? I deploy you to double down your trainings, take the exercises BACK to pre-2008 levels and protect our oceans, NOT blow the hell out of them. Our oceans, which support ALL life on our fragile planet, are under severe and relentless attack from over-fishing, to pollution, to carbon sequestration which turns our waters more acidic. Our inter-tidal zones are dying, our coral reefs disappearing, our large fisheries, already GONE. So does this vast emptiness just look like a playground to the Navy? An empty stadium for the global gladiators to flex their muscles, scream their insults and destroy life and peace in nature? We DO NOT need more toxins pumped into our air or waters by the Navy's desire to flex and dominate. At these times of severe budget cuts throughout education, health care and assistance for the elderly, I find your wanton doubling of exercises and its expense insulting and abhorring. Our economy is still attempting a recovery and at the time of your decision to double exercises, was at a state of collapse. Yet, you pushed on at the expense of life, of education and health and the well being of all. This hellbent attitude of destruction and vast waste of much needed financial resources must end. Why do we need this constant drive to KILL, to CONQUEST, to DEFEND? What enemy are you truthfully fighting? The whale, the dolphin, the salmon, the seal? OUR CHILDREN'S FUTURE? Your actions on these matters leave me speechless and angry. Why can't we truly BE a country which leads by example, a country which values life, which values our oceans, our forests, our environment? "Taking" life from the ocean to study the effects of blowing them up is insane. Stop stop stop this madness! For the future of our children and their children and their children, leave the oceans alone, to heal, to replenish, to continue to bring health and well being to all life on Earth. I ask you to cut back your	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	training exercises to pre-2008 levels, and to immediately stop polluting our waters with your toxic chemicals and your doubled fossil fuel emissions. Stop! If a private citizen were to act in the manner you act, that citizen would be locked up for years. Look in the mirror, truly ask yourself what good will be accomplished in having a strong Navy, a trained Navy if there are no oceans to sail, no planet to protect. There you go, how about defending and protecting the health of the planet and NOT the corporations which make their money off of WAR! Enough is enough. As you look in that mirror, ask yourself why you treat our Mother Earth and Mother Ocean with such contempt and uncontrollable harm and destruction. It makes NO SENSE. Leave HER alone, to heal or I fear, we shall ALL perish from your actions. For the Earth, Education & Peace Len Greenwood	
Griffith (Electronic)	I am horrified at your disregard for lifeforms other than our own. Most, if not all, of the animals you will be affecting are on the endangered species list, and those lives are just as valuable (if not more so) than a human's. With such superior intelligence that we humans have been blessed with, one would think that the US Navy would be able to come up with a better plan--one which doesn't wipe out or handicap tens of thousands. The species that you would kill and endanger are crucial to the underwater ecosystems they live in, and without them, our world would be in chaos; it already is in chaos from the damage we've done. Please don't cause such harm for your own means. I have a deep and profound respect for the Navy that supports and protects my country. I also have an equally deep and profound respect for our planet--one that friends and enemies alike must share--and I truly hope that the US Navy keeps that in mind. The consequences of what you are planning to do are not worth the means that you would achieve. Find another way; one that doesn't harm the innocent.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Groeber (Electronic)	It is known that the use of sonar and explosives in naval maneuvers threatened the lives of marine mammals and fish. Since many species of marine mammals are threatened with extinction, I can not understand that use of sonar and explosives are required for these exercises. Don't inflict such damage to the habitat ocean for only a maneuver!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy has conducted training in these operating areas regularly for approximately 60 years. Though the intensity of live training will increase, the events are of relatively short duration and therefore the Navy does not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear mid- and high-frequency sound sources which make up the majority of sound producing activities.
Grosch (Electronic)	Please remember that whatever decision you make to help the whales and the dophins they are also for our cuntry because everything on this planet is interconnected. I f the decision is harmful for whales and dolphins it will also be harmful for all living in our country.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Guanson (Written)	Opposed.	Thank you for participating in the NEPA process.
Guglielmelli (Electronic)	The ocean is very important to this planet... The lives of the dolphins whales and all other marine life are dependent on humans... We must be the voices for our oceans.... This is not acceptable and should not be allowed. I stand firmly against the testing of sonar in OUR OCEAN.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Gyedu (Electronic)	USA STOP YOUR PLANS.MARINES MAMMALS NEED PROTECTION! DARIA GYEDU,POLAND	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hale (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thank you for your time and consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hall (Electronic)	You cannot possibly allow the atrocities of deafening and killing the beautiful dolphins and whales in these waters!!!!! They are living creatures who feel pain, emotion, and fear. Why would anyone think that it is OK to kill a living being for the purposes of Navy exercises or for any other reason. As a citizen of this world I demand that the deafening and killings of Dolphins and whales be absolutely prohibited. Humanity must be much more evolved than to stoop to these barbaric and dim witted measures for their own futile purpose. Kathleen F. Hall PhD Candidate The University of Victoria, British Columbia, Canada	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hallowell (Electronic)	Protect whales and dolphins. Stop sonar testing in the Pacific Ocean.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hambley (Electronic)	The military uses nearly any excuse to continue doing whatever they are doing...overthrowing the marine mammal act should not be something the Navy needs to do...wild marine mammals do not need to be included in the military necessary kill ratios...they have enough humans killing them as it is...	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hammonds (Electronic)	The US Navy has released its initial Draft Environmental Impact Statements for the next 5-year round of permits it will seek from the National Marine Fisheries Service for its at-sea training activities. I would ask the NMFS to place an extremely high priority on the protection of marine mammals as it reviews the permit applications. I note with alarm that the numbers of marine animals expected to be affected have skyrocketed. The Navy's estimate of the number of animals whose behavior could be affected has jumped from 770,000 to 14 million, including 2 million cases of temporary hearing impairment, in addition to 2,000 animals experiencing permanent hearing loss. And, the Navy estimates that explosives training and testing could kill 1,000 animals. This is simply not an acceptable level of take. Marine mammals are extremely valuable creatures and we don't know enough about them to risk causing them this level of harm. This action, without substantial mitigation, is outside ethical boundaries. There is a solution that would balance national security needs with the need for environmental protection. So far, the Navy is refusing to set aside areas of high marine mammal density where sonar should not be used. NMFS should take every possible step to require the Navy to change its position on this. Sensitive breeding and foraging habitats and biologically unique areas within the training area must be protected from use for sonar and underwater explosives training. Safeguarding specific areas of sensitive habitat is the best way to lessen harm to whales and dolphins from sonar and other activities. I understand the need to balance national defense with protection for the environment. The best way to do this is not to use the technology in the same areas where whale and dolphin numbers are high or during breeding seasons. The Navy must do more to identify and set aside the most environmentally sensitive portions of its training areas and not conduct training and testing in such areas.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The Navy is proposing to implement several mitigation measures within pre-defined habitat areas in the Study Area. For the purposes of this document, the Navy will refer to these areas as "mitigation areas." As described throughout this section, these recommended mitigation areas may be based off endangered species critical habitats, endangered species reproductive areas, or bottom features. The size and location of certain habitat areas, such as the critical habitats, is subject to change over time; however, the Navy's effectiveness and operational assessments and resulting mitigation recommendations are entirely dependent on the mitigation area defined in this document. Therefore, it is important to note that the Navy is recommending implementing mitigation measures only within each area as described in this document. Applying these mitigations to additional or expanded areas could potentially result in an unacceptable impact on readiness.. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Han (Written)	Opposed.	Thank you for participating in the NEPA process.
Hansen (Electronic)	Visual detection can miss anywhere from 25–95 percent of the marine mammals in an area. It's particularly unreliable in rough seas or in bad weather. We learn more every day about where whales and other mammals are most likely to be found. We need a healthy ecosystem in the ocean. Would the Navy be allowed to drop bombs on animal sanctuaries on land? Enough destruction of the Ocean and it's inhabitants. Protect marine life.	The Navy's mitigation plan involves more than just visual monitoring. Aerial monitoring and passive acoustic monitoring are used as well. The EIS/OEIS, Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring), presented the U.S. Navy's mitigation measures, outlining steps that would be implemented to protect marine mammals and Federally listed species during training and testing events. In addition, the probability of trackline detection is for visual observers during a survey. In general, there will be more ships, more observers present on Navy ships, and additional aerial assets all engaged in exercise events having the potential to detect marine mammals, than is present on a single, generally smaller (having a lower height of eye), survey ship. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Harden-01 (Electronic)	Please evaluate this incident: State cites Navy for hazardous waste violations Tuesday, July 3, 2012 6:33 PM ESTUpdated: Jul 03, 2012 5:08 PM <em class="wnDate">Tuesday, July 3, 2012 11:08 PM EST The Hawaii State Department of Health (DOH) has issued a notice of violation with a penalty fine totaling $80,000 against the U.S. Navy Public Works Center Makalapa Compound for alleged violations of the state's hazardous waste and used oil rules. Makalapa Compound operates as a base yard for maintenance activities for Pearl Harbor Navy Region Hawai'i. Makalapa faces four counts of failure to make a hazardous waste determination and two counts of storage of hazardous waste without a permit. During a routine	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	inspection on August 31, 2011, DOH found Makalapa failed to make a hazardous waste determination for corrosive wastes generated during coil cleaning of refrigerant equipment and for wastes generated from the use of solvents containing methyl ethyl ketone and perchloroethylene. These wastes were disposed of in the trash instead of handling them as hazardous wastes. Makalapa also stored hazardous waste paints and fuels in open containers, thereby violating the requirements for a permit for storage of hazardous waste. The Navy has 20 days to contest its notice of violation and request a hearing. Navy responds to State Dept. of Health The Navy received a Notice of Violation from the State Department of Health (SDOH) in June 2012 for non compliance activities discovered during an inspection at Naval Facilities Engineering Command, Hawaii in August 2011. The Navy took immediate corrective action, provided refresher training, and increased internal reviews to ensure compliance. An unannounced follow-up visit by SDOH in February 2012 revealed no negative comments or report. The Navy is committed to protecting and preserving the environment. The Navy has formally requested a hearing to contest the Notice of Violation and Order and penalty. During an unannounced inspection in August 2011, one (1) open hazardous waste drum in a hazardous waste accumulation site and three (3) open paint-related cans were identified as being improperly managed under the Resource Conservation and Recovery Act. The Navy addressed the concerns immediately and implemented procedures to ensure these actions are not repeated. Internal periodic reviews by subject matter experts indicate that the facility remains in compliance. "The Navy in Hawaii takes its environmental stewardship very seriously and is constantly working towards being in compliance with all hazardous waste laws," said Aaron Poentis, Navy Region Hawaii Environmental Program Director. "In this case, SDOH inspectors found concerns at one of our local commands in August 2011 which we immediately corrected. A follow up SDOH visit occurred in February 2012 which did not generate any comment or report. I am confident that after our requested hearing for the Notice of Violation and Order much of the allegations will be resolved to the satisfaction of the SDOH." The Navy plans to discuss SDOH's allegation and assessment. The Navy received the inspection report in November 2011, and a summary of our efforts and corrective actions was immediately forwarded to DOH in a January 2012 correspondence. As always the Navy is committed to operating in a manner protective of the environment. The Navy has a long history of demonstrated environmental compliance. National defense and environmental protection are, and must be, compatible goals. [http://www.hawaiinewsnow.com/story/18946134/state-cites-navy-for-hazardous-waste-violations]	
Harden-02 (Electronic)	Please evaluate this incident: During a routine inspection on August 31, 2011, DOH found Makalapa failed to make a hazardous waste determination for corrosive wastes generated during coil cleaning of refrigerant equipment and for wastes generated from the use of solvents containing methyl ethyl ketone and perchloroethylene.	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	[http://hawaiiindependent.net/story/department-of-health-fines-navy-80000-for-hazardous-waste-used-oil-violatio] Hawaii fines Navy $80K for hazardous waste Tuesday Jul 3, 2012 18:52:43 EDT PEARL HARBOR, Hawaii — Hawaii's health department has cited the Navy for hazardous waste and used oil violations. The state Department of Health said Tuesday it issued a violation notice with an $80,000 fine against the U.S. Navy Public Works Center Makalapa Compound in Pearl Harbor. Health officials say the base yard compound violated the state's hazardous waste and used oil rules by disposing of corrosive waste and solvents in the trash instead of handling them as hazardous waste. Another violation involves storing hazardous waste paints and fuels in open containers. The violations were discovered during a route inspection in August 2011. The Navy has 20 days to contest the notice of violation and request a hearing. Navy Region Hawaii did not immediately comment. [Navy Times, http://www.navytimes.com/news/ 2012/07/ ap-hawaii-fines-navy-hazardous-waste-070312/] July 3, 11:35 PM EDT Hawaii fines Navy $80K for hazardous waste PEARL HARBOR, Hawaii (AP) -- Hawaii's health department has cited the U.S. Navy for hazardous waste and used oil violations. The state Department of Health said Tuesday it issued a violation notice with an $80,000 fine against the U.S. Navy Public Works Center Makalapa Compound in Pearl Harbor. Health officials say the base yard compound violated the state's hazardous waste and used oil rules by disposing of corrosive waste and solvents in the trash instead of handling them as hazardous waste. Another violation involves storing hazardous waste paints and fuels in open containers. The violations were discovered during a route inspection in August 2011. Navy Region Hawaii spokeswoman Agnes Tauyan says the Navy has taken corrective action, provided refresher training, and increased internal reviews to ensure compliance. The Navy has formally requested a hearing to contest the violation notice. [Stars and Stripes, http://ap.stripes.com/dynamic/stories/H/HI_NAVY_VIOLATIONS_ HAZARDOUS_ WASTE_HIOL-?SITE=DCSAS&SECTION=HOME&TEMPLATE=DEFAULT&CTIME=2012-07-03-23-35-05]	
Harden-03 (Electronic)	Please evaluate this information: Navy to resume sinking old ships in US waters Published: 7/02 11:26 pm Updated: 7/02 11:30 pm PEARL HARBOR, Hawaii (AP) -- The U.S. Navy is resuming its practice of using old warships for target practice and sinking them in U.S. coastal waters after a nearly two-year moratorium spurred by environmental and cost concerns. Later this month, three inactive vessels - Kilauea, Niagara Falls and Concord - will be sent to a watery grave off Hawaii by torpedoes, bombs and other ordnance during the Rim of the Pacific naval exercises, or RIMPAC. The military quietly lifted the moratorium on Sinkex, short for sinking exercise, last year after a review of the requirements, costs, benefits and environmental impacts of the program, the Navy said in a statement to The Associated Press. It will be the first time since 2010 the Navy has used target practice to dispose of an old ship. Previous targets have ranged from small	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	vessels to aircraft carriers such as the USS America, which was more than three football fields long. Conservation groups argue that the ghost ships should instead be recycled at a ship-breaking facility. Concerns about the long-lasting effects of toxic pollutants onboard the ships spurred a lawsuit by those groups to force the Environmental Protection Agency to better catalog and regulate Sinkex. The case, filed in U.S. District Court in San Francisco, is ongoing. The groups said they did not plan to seek an injunction to stop the Navy from restarting the exercises. "We are appealing to the Navy to continue their moratorium at least until our case is heard," said Colby Self of the environmental group Basel Action Network, which joined the Sierra Club in suing the EPA. "After the vessels hit the sea-bottom, it will be a little too late to redress damages to our precious marine resources." The Navy says Sinkex offers valuable live-fire training for times of war and provides clean vessels for at-sea, live-fire exercises. The ships can be targeted from the air, ocean's surface or underwater, with the results aiding the acquisition, planning and design of future vessel classes and systems, the Navy said. For decades, the Navy destroyed the vessels with little or no oversight. Then in 1999, the EPA ordered the Navy to better document toxic waste left on the doomed ships while removing as much of the material as possible. In return, the EPA exempted the military from federal pollution laws that prohibit any such dumping in the ocean. The Navy is still in charge of estimating the amount of pollutants onboard after the ships are prepared for sinking. In addition, the Navy must file an annual report with EPA estimating the amount of PCBs, or polychlorinated biphenyls, carried by the vessels. High levels of the chemical are believed to increase the risk of certain cancers in humans. It was banned by the U.S. in 1979 in part because it is long-lasting and accumulates throughout the food chain. Vice Admiral Gerald Beaman, commander of the combined task force running the exercises, said Monday that each ship will be stripped of PCBs and other contaminants such as asbestos, as required by the Navy's agreement with EPA. "There are severe restrictions that are placed on any hulk of that nature," Beaman said during a news conference at Pearl Harbor, flanked by commanders from participating countries. The Navy must also conduct the exercises at least 50 nautical miles from shore and in water at least 6,000 feet deep. Beaman said decisions about sinking the ships versus recycling them are made outside the scope of the exercises. A previous AP review of records from the past 12 years found the Navy got rid of most of its old ships over that time through target practice. Records show the Navy sunk 109 peeling, rusty U.S. warships off the coasts of California, Hawaii, Florida and other states during that period. Navy documents show some of the ships it sunk contained an estimated 500 pounds of PCBs. During the same time, 64 ships were recycled at one of six approved domestic ship-breaking facilities. RIMPAC, which lasts for five weeks, features training exercises for thousands of military personnel from 22 nations. [KHON news]	
Harden (Written)	"What if someone took an air horn and blasted it directly into your ear? Now turn the volume up twice as high." That's what Earthjustice says about how sonar could sound to	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	endangered marine animals off the Northwest U.S. Coast. Earthjustice is suing to move Navy actions to less sensitive areas. [Email to Cory Harden from Earthjustice, 5-29-12][Navy admits greater harm to sea mammals, Earthjustice press release 5-17-12] For actions proposed in this Hawaii/California EIS, the Navy seems unconcerned about sonar. They say "International council for the Exploration of the Sea… noted, taken in context of marine mammal populations in general, sonar is not a major threat, or significant portion of the overall ocean noise budget." [DEIS p. 3.4-114] But the Navy doesn't report that the Council also says: "The full effects of sonar on cetaceans are not well known… behavioral alteration is more important than the direct effect of the sound on hearing mechanisms. It is unknown how many animals that are affected further out to sea can survive and not strand. Little is known of the sub-lethal effects of sonar on beaked whales or on other cetacean species." http://ec.europa.eu/environment/nature/conservation/species/whales_dolphins/docs/sonar_impact_cetations.pdf] some say marine animals trying to avoid sonar may get the bends. The Woods Hole Oceanographic Institute says "blood and tissues of some deceased beaked whales stranded near naval sonar exercises are riddled with bubbles… human divers can suffer from bubbles-induced decompression sickness, also known as the bends." [Stranded dolphins exhibit bubbles, and ability to recover, WHOI press release, 10-19-11] The Navy again seems unconcerned. They say "Recent modeling suggests that even unrealistically rapid rates of ascent from normal dive behaviors are unlikely to result in super saturation to the extent that bubble formation would be expected in beaked whales…" [DEIS 3.4-93 to 95] But the Navy doesn't report that the scientists they cited also say "… modeling indicates that repetitive shallow dives, perhaps as a consequence of an extended avoidance reaction to sonar sound, can indeed pose a risk for DCS…" [Decompression sickness] [Repetitive Shallow Dives Pose Decompression Risk in Deep-Diving Beaked Whales, Zimmer and Tyack, Marine Mammal Science, 10-07] The current EIS finds that 16 times as many marine mammals might be harmed by Navy actions, compared to an estimate from an EIS just a few years ago. The earlier EIS did not consider in-port sonar testing or actions in waters between Hawaii and California. And behavioral research and computer modeling was less accurate. How much more harm will be discovered in the next few years? [Sonar, explosive pose high risk for marine mammals, Associated Press, 5-12-12] And when will old Navy and other military sites ever be cleaned up? A GAO (General Accounting Office) report found that military "policies do not specify when to conduct public health assessments… beyond the initial assessment of certain priority sites… officials… did not know what actions, if any, installations had taken on about 80 percent of… recommendations." [DOD (Department of Defense) Can improve its Response to Environmental Exposures on Military Installations, GAO-12-412, 5-1-12] The Navy May not be concerned about all this, but many citizens are. Include information from this report in the analysis of cumulative impacts—DOD [Department of Defense] Can Improve its Response to Environmental Exposures on Military Installations [by U.S.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The potential risk from sonar and other sound sources affecting the behavior of marine mammals, including the potential for acoustically mediated bubble growth, was taken into account in the Draft EIS/OEIS analysis. The discussion of this phenomenon is presented in the EIS/OEIS in Section 3.4.3.1.2.2 (Nitrogen Decompression). As noted in that section, recent modeling by Kvadsheim, Miller, et al. (2012) determined that while behavioral and physiological responses to sonar have the potential to result in bubble formation, the actually observed behavioral responses of cetaceans to sonar did not imply any significantly increased risk of over what may otherwise occur normally in individual marine mammals. The reports cited in the comment (Bernal de Quiros et al. 2012a, 2012b) were reviewed, but do not add any substantive new information to the analysis of proposed actions covered in this EIS/OEIS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	General Accounting Office] GAO-12-412, May 1, 2012 DOD relies on four types of policies to identify and respond to many but not all aspects of environmental exposures: (1) environmental restoration policies address hazardous releases at military installations; (2) occupational and environmental health policies address workplace exposures; (3) deployment health policies address the collection of occupational and environmental health data for deployed individuals; and (4) public health emergency management policies. Nonetheless, there are some limitations in the policies' coverage. For example, DOD's environmental restoration policies do not specify when to conduct public health assessments at its sites beyond the initial assessment of certain priority sites required by the Superfund law. In addition, DOD has not fully documented its responses to recommendations that result from the assessments. DOD officials responsible for oversight reported that they did not know what actions, if any, installations had taken on about 80 percent of the recommendations. Without a comprehensive tracking system, DOD has no assurance that it is addressing recommendations appropriately and could be missing opportunities to identify and resolve concerns about some health threats. Further, DOD has no policy guiding services and their installations on appropriate actions to address health risks from past exposures, which DOD attributes to the Super fund law not specifically requiring responsible parties to address such risks. http://gao.gov/products/GAO-12-412 The aggregate impacts of past, present, and other reasonably foreseeable future actions are expected to result in significant impacts on marine mammal and sea turtle species, although the contribution to those impacts from the Navy's proposed activities is low… The No Action Alternative, Alternative 1, or Alternative 2 would contribute to cumulative impacts, but the relative contribution would be low compared to other actions. Compared to potential mortality, stranding, or injury resulting from Navy Training and testing activities, marine mammal and sea turtle mortality and injury from bycatch, commercial vessel ship strikes, entanglement, ocean pollution, and other human causes are estimated to be orders of magnitude greater (hundreds of thousands of animals versus tens of animals). [p. ES-16] But the Navy requires citizen consent and is using taxpayer money. Bubble Formation A suggested indirect cause of injury to marine mammals is rectified diffusion (Crum and Mao 1996), the process of increasing the size of a bubble by exposing it to a sound field… There is considerable disagreement among scientists as to the likelihood of this phenomenon (Piantodosi and Thalmann 2004) Evans and Miller, 2003). Although it has been argued that traumas from recent beaked whale stranding are consistent with gas emboli and bubble-induced tissue separations (Fernandez et a. 2005, Jepson et al. 2003), nitrogen bubble formation as the cause of the traumas has not been verified… The hypothesis speculates that if exposure to a startling sound elicits a rapid ascent to the surface, tissue gas saturation sufficient for the evolution of nitrogen bubbles might	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	result (Jepson 2003, Fernandez 2005)… Recent modeling suggest that even unrealistically rapid rates of ascent from normal dive behaviors are unlikely to result in super saturation to the extent that bubble formation would be expected in beaked whales (Zimmer and Tyack 2007)… no marine mammals addressed in this analysis are given differential treatment due to the possibility for acoustically mediated bubble growth. [3.4-93 to 95] The DEIS contradicts the Zimmer and Tyack article I found—"ABSTRACT The impact of naval sonar on beaked whales is of increasing concern. In recent years the presence of gas and fat embolism consistent with decompression sickness (DCS) has been reported through postmortem analyses on beaked whales that stranded in connection with naval sonar exercises. In the present study, we use basic principles of diving physiology to model nitrogen tension and bubble growth in several tissue compartments during normal diving behavior and for several hypothetical dive profiles to assess the risk of DCS. Assuming that normal diving does not cause nitrogen tensions in excess of those shown to be safe for odontocetes, the modeling indicates that repetitive shallow dives, perhaps as a consequence of an extended avoidance reaction to sonar sound, can indeed pose a risk for DCS and that this risk should increase with the duration of the response. If the model is correct, then limiting the duration of sonar exposure to minimize the duration of sonar exposure to minimize the duration of any avoidance reaction therefore has the potential to reduce the risk of DCS. [bold added, REPETITIVE SHALLOW DIVES POSE DECOMPRESSION RISK IN DEEP DIVING BEAKED WHALES, Walter M. X. Zimmer, Peter L. Tyack, Article first published online: 10 SEP 2007, http://onlinelibrary.wiley.com/doi/10.1111/j.1748-7692.2007.00152.x/abstract;jessionid=6EA38DCE37C4ADC452C707C5736538F3.d04t02?denied AccessCustomisedMessage=&userIsAuthenticated=false] I don't see Piantadosi and Thalmann 2004 in the bibliography or in Google Scholar. As international Council for the Exploration of the Sea (2005b) noted, taken in context of marine mammal populations in general, sonar is not a major threat, or significant portion of the overall ocean noise budget [p. 4.3-113]. This EIS section does not mention the ICES report also says: "The full effects of sonar on cetaceans are not well known, mostly due to the difficulty of studying the interaction…high-intensity (>215dB) mid-frequency (1-10 kHz) sonar… has led to the deaths of a number of cetaceans in some places. All incidents have been investigated have occurred in the North Atlantic, or Mediterranean and have related to the use of military sonar… the most consistent deduction form the evidence is that behavioral alteration is more important than the direct effect of the sound on hearing mechanisms. It is unknown how many animals that are affected further out to sea can survive and not strand. Little is known of the sub-lethal effects of sonar on beaked whales or on other cetacean species." [http://ec.europa.eu/environment/nature/conservation/species/whales_dolphins/docs/sonar_impact_cetaceans.pdf] The increase in proposed testing activities under Alternative 2 over the No Action alternative would in turn lead to an approximately 389 percent increase in predicted impacts (behavioral reactions, TTS, and PTS) to marine mammals	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	[p. 4.3-173]. This seems to contradict the news: " The Navy estimates its use of explosives and sonar may unintentionally cause more than 1,600 instances of haring loss or other injury to marine mammals in one year… the old analysis… estimated the service might unintentionally injure or kill about 100 marine mammals." [Navy says their sonar and explosion tests could harm more marine life than previously thought, CBS News Los Angeles, 5-10-12]	
Harden (Oral-Hilo)	Thanks for taking comments. So the way Earthjustice describes the sound of sonar is they describe it as an air horn blasted directly in your ear and then turning the volume up twice as loud, and that's what they're saying how sonar could sound to endangered marine animals off the northwest U.S. coast. And as you know, Earthjustice is suing to move the Navy actions there to less sensitive areas. But for actions that are proposed in this EIS, the Navy is not as concerned about sonar as citizens are. The Navy says, "International Council for Exploration of the Sea noted, taken in the context of marine mammal populations in general, sonar is not a major threat or significant portion of the overall ocean noise." But the Navy doesn't report that the Council also says, "The full effects of sonar on cetaceans are not well known. Behavioral alteration is more important than the direct effect of the sound on hearing mechanisms. It is unknown how many animals that are affected further out to sea can survive and not strand. Little is known of the sublethal effects of sonar on beaked whales or other cetacean species." Some people say marine animals who are trying to avoid sonar may get the bends. The Woods Hole Oceanographic Institute says blood and tissues of some deceased beaked whales stranded near naval sonar exercises are riddled with bubbles, and human divers, when they get bubbles-induced decompression sickness, that's also known as the bends. The Navy doesn't seem concerned. They say recent modeling suggests that even unrealistically rapid rates of ascent from a normal dive are unlikely to result in supersaturation that would form bubbles in beaked whales. But the Navy didn't report that the scientists they cited also said modeling indicates repetitive shallow dives, maybe as a consequence of trying to avoid sonar, can indeed pose a risk for the decompression sickness. The current EIS finds 16 times as many marine mammals might be harmed by Navy actions compared to an estimate from the EIS just a few years ago. The earlier EIS didn't consider in-port sonar testing or actions in waters between Hawaii and California, and research and computer modeling was less accurate. So I wonder how much harm we'll discover in the next few years. And when will old Navy sites and other military sites ever be cleaned up? A General Accounting Office report found that military policies don't specify when to conduct public health assessments beyond the initial assessment, and officials did not know what actions, if any, installations have taken on about 80 percent of recommendations. So the Navy may not be concerned about a lot of things, but citizens are.	Earthjustice is incorrect in making the comparison of sound in the air and sound underwater for a number of reasons and there are no circumstances where sonar underwater would be like an air horn "blasted" directly in a human's ear. Sound in air and sound in water are two different scales somewhat like comparing Fahrenheit and centigrade temperature scales. Unlike these temperature scales there is no completely accurate means to convert in air sound levels to sound levels underwater although a rough approximation is that there is a 62 dB difference (80 dB in air could be equivalent to 142 dB underwater). In addition, the weighted dB scale in air is meant to reflect human perception and the frequencies best heard by humans. The point being that the frequency component of the sound is of critical importance in how a sound is perceived. Also compounding the understanding of dB scales in air and underwater is that often the dB scale in air is not always (although should be) referenced to a distance from which the source level is measured. Underwater the standard is to measure source level at one meter (approximately 1 yard) from the source. Therefore what a marine mammal hears as a received sound level at any distance from sonar beyond one meter is the sound level reduced by various factors as explained in the HSTT EIS/OEIS Section 3.4.3. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Harmon	Someone who works at PMRF on Kauai island told me recently that it's all about money. Jobs and money to the military industrial complex. These exercises are not making us	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	safer. We already far surpass our enemies in military expertise. We win over our enemies by being a good shepard of the planet. We rejuvenate the ocean so it can give life providing nourishment to our present and future generations. As it is the ocean is dying from being over fished and used as a dumping grounds for toxins which includes those created by the military shooting off missiles and creating ear drum deafening sonar. one of the largest dump sites for plastic is between here and San Diego, larger than the state of Texas. Such sites, called gyres are found in oceans around the globe. The toxins from broken down plastics are found in fish and humans that eat those fish. It is no wonder the oceans are dying. What we need is to stop the killing of marine life so it can recuperate from the present harm we inflict daily. 1. strict fishing quota enforcement because the ocean is over fished. 2. we need an aggressive full on assault of plastic dumps in the ocean. 3. stop military exercises that harm the life of the ocean.	
L. Harris (Electronic)	It's time to stop testing. Please do so.	Thank you for participating in the NEPA process.
M. Harris (Electronic)	Please, please, for the mercy of the living creatures who reside in the ocean STOP THE UNDERWATER SONAR/SOUND TESTING. The US military is without question, the strongest, most advanced military on our great blue planet. It is now time for our great military to make its future technical advances in humane ways. Please stop!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Harrison-Hinds (Electronic)	We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. This is not a dress rehearsal, ladies and gentlemen. We only have one chance to get this right so let's do so. Let's do the right thing and think of all the beautiful and wonderful creatures and do no harm, especially in the name of humanity.	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding the 2003 Washington State stranding event referred to in the comment, although mid-frequency active sonar was used by the Navy, the distribution of harbor porpoise strandings by location and with respect to time surrounding the event do not support the suggestion that mid-frequency active sonar was a cause of harbor porpoise strandings. Rather, a lack of evidence of any acoustic trauma within the harbor porpoises, and the identification of probable causes of stranding or death in several animals, supports the conclusion that harbor porpoise strandings were unrelated to Navy sonar activities. Regarding the 2005 North Carolina stranding event, NMFS was unable to determine any causative role that sonar may have played in the stranding event. All of the species involved in this stranding event are known to occasionally strand in this region. Although the cause of the stranding could not be determined, several whales had preexisting conditions that could have contributed to the stranding. Cause of death for many of the whales was likely due to the physiological stresses associated with being stranded. A consistent suite of injuries across species, which was consistent with prior strandings where sonar exposure is expected to be a causative mechanism, was not observed. For a complete analysis of these and other stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Harrold (Electronic)	DO NOT DO THIS! you have no right to inflict pain and injury upon innocent, unsuspecting animals. Be a compassionate navy, PLEASE!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Harte (Electronic)	Continuing to conduct tests that will seriously damage huge numbers of marine animals will further damage important marine ecosystems that are already being stressed through other human activities, including overexploitation and climate change. We derive a significant amount of food and revenues from our marine environment. Damaging it further damages us and weakens our national security. Given this, the Navy should seriously consider terminating such tests.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hasler (Electronic)	Please do not do sonic testing in the waters that will harm ocean animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Haug (Electronic)	NO SONAR USE IN OUR OCEANS! YOUR AGENDA IN NOT AS IMPORTANT AS THE LIFE YOU ARE HARMING AND ENDING. FIND ANOTHER WAY TO ACCOMPLISH WAIT YOU ARE TRYING TO ACCOMPLISH.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hawthorne-01 (Electronic)	I recently learned that the Navy has projected that they will deafen 1600 cetaceans and kill 200 marine mammals EACH YEAR IN A 7-YEAR PROGRAM in the name of training for our defense. I am writing to add my voice of outrage against the horror of this plan. With all the creativity humans possess, and the resources of our military, I urge you to find other ways to plan for our defense. This plan is unconscionable. Thank you.	The Navy does not anticipate any mortality from its activities. Though the model estimates the potential for mortality based on very conservative criteria, with the implementation of proven mitigation and decades of historical information from conducting training and testing in the study area, the likelihood of mortality is near zero and would not impact populations. Additionally, there is no evidence that the type of injuries that could potentially occur (fully recoverable or limited permanent threshold shift) have or will result in follow on mortality. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures must be estimated scientifically using complex modeling, but it is only an estimate, not a prediction. This estimate needs to

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		encompass the capacity of what could occur to ensure Navy's permits are not exceeded. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hawthorne-02	I beg you not to test the Navy's underwater system at the expense of deafening thousands of dolphins and whales. They will lose their own ability to navigate. Please say no to this life-damaging activity! These creatures are too important to the balance of life on earth.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Haydon (Electronic)	We know that sonar blasts kill ocean life. I am writing to state my strong opposition to the sonar tests and exercises along the coast. These exercises will be devastating to whales, dolphins, and other animals. Please reconsider your plans. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hays (Electronic)	Please refrain from endangering thousands of marine mammals on the East Coast and West Coast and implement protective measures as part of the Navy's training program. These marine mammals are an incredibly important part of our ecosystem, and there are many ways in which the Navy can mitigate the impact of its training programs. Please increase your efforts to protect whales, poroises, and dolphins from harm during naval training and testing. There are several steps the Navy can take to reduce the impact on these animals, including avoiding calving areas and migratory pathways, creating a safety zone around testing areas, and monitoring the training/testing areas for marine mammal activity. Please do the right thing and take important but simple steps to protect our seas and sea life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hazard (Electronic)	Please suspend this operation now!	Thank you for participating in the NEPA process.
Hazarika (Electronic)	This should not be done...there are a lot of intelligent people from the govt. and armed forces.that are involved in these operations ..i belive they should opt. for some other alternative..and no living being should be harmed from these operations or experiments..	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Heard (Electronic)	National security takes many forms. If we ruin our oceans at the rate we're going, we'll all be dead anyway. Please widen the definition of "security" This is my respectful request, Cassandra Heard	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Heizer (Electronic)	There MUST be a way that the Navy can do tests WITHOUT killing all this marine life!! In THIS DAY AND AGE we should be peaceful instead of trying to kill everything around us!! PLEASE PLEASE consider this!!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Hennessy (Electronic)	As a citizen of the United States of America, I do not understand how the world's most powerful navy justifies harming other species in order to improve military techniques. Marine mammals, birds, fish, turtles, and habitat could be harmed with sounds, explosions, detritus, and electromagnetic impulses that are being implemented to supposedly train our navy personnel for future combat. This is complete nonsense. No other military in the world is as advanced or as well-funded as ours, and the ones that we would possibly need to prepare for war against do not have navies of any substantial power. We could easily beat them with conventional weapons, that we already know how they work and have an ample supply of. Radiation levels in some places in the southwest are still elevated due to atomic tests in the 1940's and 1950's; the long-standing effects of these tests are rarely, if ever, accurately estimated beforehand. Do we really need to cause irreparable harm to creatures that have no part in human warfare? Including those that are already suffering from dwindling populations? When is enough enough? Let's see this for what it truly is; a job-advancement ladder for weapons engineers, using "training" as a scrim, and meted on the backs of taxpayers and wildlife. How many whales would be deafened, disoriented, and killed by this operation? And for what purpose do we ask them to make that sacrifice? The costs outweigh the benefits, if only we would take all costs into consideration.	Thank you for participating in the NEPA process.
Hepworth (Electronic)	No live explosives and sonar exercises, please! They kill thousands of precious animals that have right to live.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Hernandez (Electronic)	it's not right that the navy would do something like this KNOWING what harm it could do to the environment. Your disrupting the balance which in the end the results will be tragic and that will be on you who are trying to go through with this. Do the research and think	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	how this can harm not just you, but everyone. Please reconsider. Sincerely, Cristina Hernandez	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Herrera (Electronic)	I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Herron (Electronic)	Please don't do it. Find a laboratory way to test your sonar weapons. Leave the oceans and their inhabitants to peace. They, like civilians, should have rights.	Thank you for participating in the NEPA process.
Hess (Electronic)	The injury or morality of any marine mammals due to the actions of the Navy are completely unacceptable. There is no legitimate reason that national defense should ever cause harm to any wildlife. The Navy should be implementing the protection and recovery of the wildlife they have harmed over the past two centuries, not further endangering these creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hidaka (Electronic)	I understand the need for protecting our country, but please find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. I know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. I support the HSUS and other environmental and animal welfare groups in asking the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding the 2003 Washington State stranding event referred to in the comment, although mid-frequency active sonar was used by the Navy, the distribution of harbor porpoise strandings by location and with respect to time surrounding the event do not support the suggestion that mid-frequency active sonar was a cause of harbor porpoise strandings. Rather, a lack of evidence of any acoustic trauma within the harbor porpoises, and the identification of probable causes of stranding or death in several animals, supports the conclusion that harbor porpoise strandings were unrelated to Navy sonar activities. Regarding the 2005 North Carolina stranding event, NMFS was unable to determine any causative role that sonar may have played in the stranding event. All of the species involved in this stranding event are known to occasionally strand in this region. Although the cause of the stranding could not be determined, several whales had preexisting conditions that could have contributed to the stranding. Cause of death for many of the whales was likely due to the physiological stresses associated with being stranded. A consistent suite of injuries across species, which was consistent with prior strandings where sonar exposure is expected to be a causative mechanism, was not

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		observed. For a complete analysis of these and other stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hill (Electronic)	The Navy's mid-frequency sonar has been implicated in mass strandings of marine mammals in, among other places, the Bahamas, Greece, the Canary Islands, and Spain. In 2004, during war games near Hawai'i, the Navy's sonar was implicated in a mass beaching of up to 200 melon-headed whales in Hanalei Bay. In 2003, the USS Shoup,operating in Washington's Haro Strait, exposed a group of endangered Southern Resident killer whales to mid-frequency sonar, causing the animals to stop feeding and attempt to flee the sound. "In 2003, NMFS learned firsthand the harmful impacts of Navy sonar in Washington waters when active sonar blasts distressed members of J pod, one of our resident pods of endangered orcas," said Kyle Loring, Staff Attorney for Friends of the San Juans. "Given this history, it is particularly distressing that NMFS approved the Navy's use of deafening noises in areas where whales and dolphins use their acute hearing to feed, navigate, and raise their young, even in designated sanctuaries and marine reserves." In 1996 twelve Cuvier's beaked whales beached themselves alive along the coast of Greece while NATO (North Atlantic Treaty Organisation) was testing an active sonar with combined low and mid-range frequency transducers, according to a paper published in the journal Nature in 1998. The author established for the first time the link between atypical mass strandings of whales and the use of military sonar by concluding that although pure coincidence cannot be excluded there was better than a 99.3% likelihood that sonar testing caused that stranding.[16][17] He noted that the whales were spread along 38.2 kilometres of coast and were separated by a mean distance of 3.5 km (sd=2.8, n=11). This spread in time and location was atypical, as usually whales mass strand at the same place and at the same time. The Navy's mitigation plan for sonar use relies primarily on visual detection of whales or other marine mammals by so-called " watch-standers" with binoculars on the decks of ships. If mammals are seen in the vicinity of an exercise, the Navy is to cease sonar use. "Visual detection can miss anywhere from 25–95% of the marine mammals in an area," said	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding the 2003 Washington State stranding event referred to in the comment, although mid-frequency active sonar was used by the Navy, the distribution of harbor porpoise strandings by location and with respect to time surrounding the event do not support the suggestion that mid-frequency active sonar was a cause of harbor porpoise strandings. Rather, a lack of evidence of any acoustic trauma within the harbor porpoises, and the identification of probable causes of stranding or death in several animals, supports the conclusion that harbor porpoise strandings were unrelated to Navy sonar activities. Regarding the 2005 North Carolina stranding event, NMFS was unable to determine any causative role that sonar may have played in the stranding event. All of the species involved in this stranding event are known to occasionally strand in this region. Although the cause of the stranding could not be determined, several whales had preexisting conditions that could have contributed to the stranding. Cause of death

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Heather Trim, Director of Policy for People For Puget Sound. “It’s particularly unreliable in rough seas or in bad weather. We learn more every day about where whales and other mammals are most likely to be found—we want NMFS to put that knowledge to use to ensure that the Navy’s training avoids those areas when marine mammals are most likely there.” Some of the mid-frequency sonar systems the Navy employs are capable of generating sounds in excess of 235 decibels. A normal human conversation takes place at 60-70 decibels; a loud rock concert is about 115 decibels; permanent hearing damage for people can occur from short-term exposure to 140 decibels. The decibel scale is a logarithmic scale, and each ten-decibel rise along the scale corresponds to a ten-fold increase in power: a sound measuring 130 decibels is ten times more intense than a 120 decibel sound, a sound of 140 decibels is 100 times more intense, and a sound of 150 decibels is 1,000 times more intense. Judge David A. Ezra found that the Navy was violating federal law, after Earthjustice sued the Navy last May for violating the National Environmental Policy Act (NEPA) and the Coastal Zone Management Act (CZMA. Judge Ezra said, “there is little disagreement that MFA [mid-frequency active] sonar can cause injury, death, and behavioral alteration to these animals.” The judge noted that the Navy's harm threshold -- 173 decibels (dB) -- contradicts the best available science and "cast into serious doubt the Navy's assertion that, despite over 60,000 potential exposures to MFA sonar, marine mammals will not be jeopardized." Further, he ruled that the Navy’s reliance on a noise level of 173 decibels, below which it claims harm to animals from its sonar will not occur,was “arbitrary and capricious,” an acknowledgment that even sonar noise at much lower intensity levels can harm and kill marine mammals.“Whales have stranded and died at predicted noise levels of around 150 decibels – 100 times less intense than the threshold set by the Navy,” said AWI President Cathy Liss. “Such a level is without scientific justification.” The court determined that the Navy had failed to explore reasonable alternatives to conducting its exercises, failed to notify and involve the public as required by law. The Navy must, take greater precautions to protect marine life and use the latest scientific information to identify these biological “hot spots” and establish protection for marine mammals and other species.” Examples of mitigation measures include not operating: at nighttime,at specific areas of the ocean that are considered sensitive,when dolphins are bow-ridings,low ramp-up of intensity of signal to give whales a warning, air cover to search for mammals,using fish-finders to look for whales in the area	for many of the whales was likely due to the physiological stresses associated with being stranded. A consistent suite of injuries across species, which was consistent with prior strandings where sonar exposure is expected to be a causative mechanism, was not observed. For a complete analysis of these and other stranding events, please see the Marine Mammal Stranding Report, found on the HSTTEIS.com website at: http://hstteis.com/Portals/0/hstteis/SupportingTechnicalDocs/ Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hines (Electronic)	The Navy is PROPOSING A REAL INCREASE TO THEIR ACTIVITES, ESPECIALLY WAR GAMES AND SONAR. SONAR TORTURES AND KILLS whales and dolphins and people apparently or at least assists them in killing people (under the name of so called protecting people) and apparently helps them refine killing people (war games)! I am a kind, loving human whose intentions are to honor life. By dedicating myself to seeing the sacredness of all life, thereby reveres all of life, I walk through the day lifting the consciousness of many, many people simply by being. As the EIS becomes reverent the	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	tendency to allow harm to anything including its self as an entity, diminishes and the overall consciousness raises on this planet and peace reigns supreme. I ask to please consider what the navy is asking. we are either in a fear based solution attracting more fear/war or a love based solution attracting more loving/kind solutions. The Navy is stating its going to kill. I am living in opposition to what the navy proposes. Please allow my influence to count in not allowing the navy a permit for any of the proposed activities. Aloha and peace to whomever this my reach, -Craig Hines	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hitch (Electronic)	Please do not go through with the Navy sound testing. It will have major repercussions to the state of our ocean and the balance of life. It will KILL many creatures, make many whales and dolphins go DEAF!! This would be a HUGE MISTAKE! Please don't do it!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
J. Ho (Oral-Hilo)	Hi. My name is Jennifer Ho, and I live here in Hilo, Hawaii. I thank you for coming and making an opportunity for us to give you public testimony. I'm very concerned. My brothers both served in the -- two of my brothers served in the Navy, and I'm concerned about today's Navy. I know that in your mission to take care of America, you do a lot of submarine sonar, and that is something that I know has harmed sea life. It's harmed whales, other cetaceans, dolphins, and I understand turtles also are at risk. And it's of great concern for me about the increased militarization of Hawaii and of our oceans	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	because I know on Jeju Island, we've had increased military presence and that as we're closing bases abroad, more of the military are moving to new places. So here we are wanting to make room for you and wanting to see you as heroes, and you wanting to see yourself as heroes, and yet I see what you are being asked to do is not heroic. You are in ships that use sonar to detect an enemy, an enemy that might not even be there. I think if we changed our American policies not to be so militaristic, if we work with other nations to help them have a better quality of life, who would attack the person that's helping them have a better quality of life? And your need to be so wary is -- if you're only looking for enemies, that's what you'll see. And I don't think whales or dolphins are enemies, and I know water amplifies sound. And I really wish that those of you who want to see yourselves doing the right thing would ask that your policies, the Navy's policies, and the increased militarization would change. And I thank you for taking this time to let me speak.	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
N. Ho (Oral-Hilo)	Yeah. Aloha. Can everybody hear me? My name is Nelson Ho. I live here in Hilo, am a lifetime resident of Hawaii. I'd like to thank the military for presenting this opportunity, and I hope it's recorded and heard by more than you folks here in the room. First of all, I'd like to speak out for the whales having their three minutes. In fact, I'd like to reverse it. I'd like for the Navy to have three minutes and then silence for the whales, for the turtles, for all the mammals and all the marine organisms that you folks are impacting. That's one of the concerns that I have. The second one is for the overall militarization of Hawaii, an independent Hawaiian kingdom that was overthrown at the point of a bayonet by -- I think it was the Marines. Is that right, Moani? Thank you. This was an independent nation, and it's still under occupation. And it was the military that enabled a civilian government to be overthrown. I'd like to bring that to your attention. The third thing, openly I'd like to create cognitive dissonance within the military because I think the military's mission has been distorted. And this whole desire for protection has led us into, I think, an overwhelming political force, military force, that is really bullying the rest of the world. And I, as a citizen who pays my taxes, wish that with stop. And I want you to see a person here who is willing to stand up and say that as a tax-paying American citizen, who believes in the Constitution even though I feel it's being dismantled by the corporations and the powers that be. I want to stand in opposition to that. So while I believe that the military may, in fact, be the largest researcher for marine studies, that's insufficient given the nature of your business and given the impacts, the adverse impacts that you are creating to our environment and our human society because while all this money and research goes to speak in favor of your military activities, our society is decaying. We can't pay for teachers. And in summary our society is becoming a third-world society, and we are creating way too many enemies that we don't need. So I thank you for listening to me and recording this testimony.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hofacre	As a visitor to Kauai for many years, I am opposed to any testing that harms the dolphins	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	and whales. Please find another way and spare these beautiful creatures.	Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hoffmann (Electronic)	I heard, that you are planning Sonar experiments in and around Hawaii. Please do not do so! Sonar tortures and kills whales and dolphins (as they are loosing their orientation) - and there are so many whales and dolphins living around Hawaii! Please remain sensitive to nature and it´s animals. Hawaii is such a paradise... Thank you very much!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Holt (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, Thanks, Justin Holt	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Holtz (Electronic)	Please consider steps to reduce the harmful impacts of training and testing to marine mammals. Please consider avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Holzman (Oral-Kauai)	Hi, my name is Greg Holzman, and I'm a resident of the west side of Kauai for 30 plus years and fishing out there 25 years off Niihau, Kailua, and Kauai. You know, my biggest concern that I want to get on record right away is that we would like to see as fisherman who go out to kolua rock and the middle banks, which is right up against the marine sanctuary at Northwestern Hawaiian Islands, and we would like to see a better warning of scheduling so that if we go up all the way up, you know, it takes us 17, 18 hours to get up there that we're not having a helicopter telling us we have to move, you know, eight hours out of our fishing grounds or going out to Kaula Rock and then being told in the middle of the night to move. If we can schedule our fishing trips around, you know, better scheduling, then we would really appreciate that. How you guys do that, I'm not sure whether it's a website or we can call a number. I know that you have that already in effect for the parts around Kauai on a lot of the missile work that goes on. But not as much for the bombing that comes out of Honolulu at Kailua or, you know, the things that go on up at the Northwest Hawaiian Islands. So that's just one thing I wanted to point out. The other thing is is that access to the area around Nahili Point should be open at least at some time. I was part of the West Side Access Committee. We really	Navy training and testing activities have the potential to temporarily limit access to areas of the ocean for a variety of human activities associated with commercial transportation and shipping, commercial recreation and fishing, subsistence use, and tourism in the Study Area. As discussed in Section 3.12.2.1.1 (Sea Space) of the Draft EIS/OEIS, when training or testing activities are scheduled that require specific areas to be free of nonparticipating vessels due to public safety concerns, the Navy requests that the U.S. Coast Guard issue Notices to Mariners to warn the public of upcoming Navy activities. Training and testing activities occur in established restricted or danger areas as published on navigation charts.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	appreciated the fact that the Navy went out and made that contact to allow us back in to surf and fish and has continued to work with the surfers and fisherman to increase those areas. We would like to see some time, one, two days a month that at least, you know, the Hawaiian people really, it's one of the few areas that has a clear, clean reef water that they can fish off of for nenue, palani, kala on the west side. And so that's really important to the Hawaiians for their benefit and for any of our people that need to fish for their diet. So I appreciate that. Thank you.	
Horzely (Electronic)	Is there not a better solution? Have you calculated the potential disturbances based on the mammals not being able to hear!!!! These are sonar-based animals? Please don't.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Houser (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing Jennifer Houser	activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Howell (Electronic)	This is ridiculous! Test in the dead sea, a deep lake or anywhere else but our oceans!!!!	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Huart (Electronic)	Please spend your money on Something worthwhile like cleaning up the oceans and preservation of endangered spcies and preventing illegal fishing	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Hubbard (Electronic)	This is something that the people should be able to vote on. My vote is no for this testing. Why is it that too much power is granted to those who want to kill or who are responsible for so many deaths in the animal kingdom and sea world? There is already too much "not caring" anymore about natural life in exchange for easy solutions that involve death and murder. WE NEED TO CARE MORE TO PROTECT LIFE; ALL LIFE HERE ON THIS PLANET, and it is very serious. PLEASE RECONSIDER THESE HORRIBLE TESTS THAT ARE NOT ABSOLUTELY NECESSARY AS THEY CLAIM THEM TO BE. Seek other solutions and options, and let the American people vote on it too.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hunt	We know that in the past, whales have stranded and died in the wake of major military	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please no sonar exercises, killing innocent marine mammals!! sincerely, Traci Hunt	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Huntemer (Electronic)	Very briefly, I would like to state my total opposition to the Navy's proposed actions off the coasts of California and Hawaii. These waters are home to numerous species of cetaceans. Cetaceans are by nature very sensitive to sonic and other vibrations. Manoeuvers involving noise and other vibrations could injure or kill them. This is a well known fact. Not only might these prosposed actions be detrimental to cetaceans but theier disruptive effects on other types of marine life have not been adequetely studied. Indeed comprehensive studies on the cetacean populations have not even been carried out yet. however, all evidence pionts to thier sensitivity. PLEASE do not go ahead with these manoeuvers! Thank you for your time and attention. Angela Huntemer.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Hurd (Electronic)	I'm dismayed to read: The Washington Post (Associated Press) May 11, 2012 – Revealed today that a "New Navy study says use of sonar, explosives may hurt more marine mammals than once thought"[25]. "…HONOLULU-The U.S. Navy may hurt more dolphins and whales by using sonar and explosives in Hawaii and California under a more thorough analysis that reflects new research and covers naval activities in a wider area than previous studies…" and... On May 17, 2012, news reports that "Mass dolphin deaths in Peru caused by acoustic trauma" were announced by "…Dr. Carlos Yaipen Llanos of ORCA in Peru informed Hardy Jones of Blue Voice that acoustical trauma is the cause of the Mass Mortality Event (MME) that killed an estimated one thousand dolphins along the coast of northern Peru in March 2012…" [28]. This is another reason to begin to limit sonar, laser, radar, and electromagnetic weapons testing in the Atlantic, Pacific, and the Gulf of Mexico. You guys are destroying that which you are charged to defend. There will be a burn-out cinder before you're through with no life forms still extant except Dick Cheney breathing through a filtration system in a bunder in Wyoming. STOP THE SONAR!! Oh, and while you're at it please put IN WRITING that you will no longer use DU munitions in practice or ever!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. In 2008, Commander Pacific Fleet directed that all Pacific Fleet ships offload all depleted uranium rounds at the earliest opportunity. The use of depleted uranium is not included in the Navy's Proposed Action. The Navy was not conducting sonar or explosives training activities within 500 miles of the Peruvian coast in the 3 months prior to or during the 2012 stranding event in Peru. The Peru stranding event did not result from acoustic trauma based on (1) the condition of the animals' ears, which clearly were not impacted by an acoustic event; (2) the timing of the strandings, which is not typical for strandings from acoustic trauma; and (3) the types of animals affected, which suggest the Peru strandings more likely occurred due to weather or biological factors such as toxic algae or disease. The Navy will continue to assist the National Marine Fisheries Service and stranding networks as needed, and remains committed to protecting marine life while performing its national security mission.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Hurley-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hurley-02 (Electronic)	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Hurt (Electronic)	My comment concerns the proposed Navy training exercises off the coast of California and Hawaii - some of the most incredible and rich marine environments in the world. I am a live-aboard, world cruiser. I just returned by sailboat from Hawaii where I visited the whales breeding grounds. The Humpback whales are an endangered species. In the past, the global humpback whale population size was about 750,000 to 2 million animals while the current global population is only about 30 to 40 thousand. With about 66% of the North Pacific population wintering in Hawaii each year, up to 10,000 humpback whales are expected to come to Hawaii this winter. I understand the need for protecting our country, but I strongly oppose destroying our marine environment to do it. We must find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures as would occur under the Navy's training exercises planned for the California coast and Hawaii. Consider steps to reduce the harmful impacts to marine mammals: including avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. This kind of devastation to the marine environment will have great costs beyond just the loss of marine mammals. There will be a significant loss of revenue from tourism and fishing as well as a great ecological cost. It just takes planning and modifying your training plans to avoid this. These marine animals are already struggling for their existence. Don't add this assault to their plight.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Huvard (Electronic)	Please develop and use training methods that do not harm or kill marine life. Thanks.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hyman (Electronic)	I hope the US Navy will take steps to reduce the impact that sonar has on marine life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Hyson (Oral-Hilo)	Okay. Well, thank you for letting me speak here. I hope my input can have some value. Star Newland and I, through the Sirius Institute and Planet Puna, have been studying mostly the effects of birth and general birth and water birth on the constitution of humans. And one of the major experts in underwater birth and birth in general is a French medical doctor named Dr. Michel Odent. And he points out that nearly all cultures have messed around with the birth imprint or the birthing process. For example, some cultures will express the mother's colostrum and throw it away to make sure that the baby never has it in spite of the fact it's the most helpful thing it could get right at birth. Other cultures would put sand, salt, bread, sugar, rice, anything other than milk as the first taste for an infant. So we have planet-wide messed up the process of birth.	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Recently -- well, not recently but over the last decades, they've been using more and more synthetic Oxytocin, Pitocin, and it's causing great fetal distress, but it also messes up the bonding and the suckling between the mother and infant. So we are rapidly losing the ability to give birth properly. The punchline of this is when you do this to an infant, since the type of life they have is dependent on their birth imprint, you end up -- if you interfere with birth in a major way like we've been doing, you end up with people that have missed connecting with their mothers, with the Earth, and they are great warriors, and they are traumatized. They're enraged, and they're ready to kill at some point because we have messed up their birth imprint. So we have fallen into this, and that might be one of the major reasons why we have such a warlike planet. So fortunately the Navy has agreed to partner with Star Newland and the Sirius Institute for domestic harmony, and so we're here to talk to them about that. And we hope that the Navy can start this process that one could imagine, for example, Navy wives giving birth in the water with the service dolphins that the Navy already has. One can imagine the service dolphins helping the returning veterans with their traumas and post-traumatic stress disorders and so on. And this could lead to a much more harmonious planet, which is consonant with the Navy goals right now, that they will pursue humanitarian efforts to avoid or reduce conflict before they will choose to attack and to do other things like that. So we're very proud that the Navy wants to do that, and we're hoping they'll continue, and we're here to help in any way to reverse this trend on the planet. Thanks.	
Igel-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Igel-02	What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Inciong (Written)	Strongly Opposed. The kingdom of Hawaii still exists albeit under prolonged belligerent occupation. Thus, as a subject of the kingdom of Hawaii, I contend there is no treaty of annexation and the U.S.A. is violating the law of occupation and the law of neutrality. We have not given our consent to the U.S.A. nor any other nation to use our territory without jurisdiction or permission. The U.S.A. government or contractors EIS/OEIS are deemed unacceptable.	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.
Ingram (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. I see these animals swimming in the ocean every day as I drive sown my hilland their rights need to be respected, Most sincerely, Barbara Ingram	pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Islas (Electronic)	I do not agree or support this effort. It is not protecting and maintaining our oceans mammals. This testing is causing harm, and I do not see any use or good coming from it.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Ivascyn (Electronic)	Please rethink the US Navy plans to conduct training exercises all along the US East Coast and in the rich marine environment off the California and Hawaii coasts. If these training sites are used, please ensure that the Navy protects marine mammals from explosives and sonar. especially in calving grounds and migratory corridors, The Navy should create large "safety zones" around the exercises so that marine mammals are not harmed. This would allow training to go forward and minimize the liklehood that whatles, dolphins and porpoises would be harmed or killed. thank you for your help with this matter.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Jackman (Electronic)	I respectively ask you, the United States Navy, to rethink your training exercises. There MUST be a way that you can safeguard our Nation and safeguard those animals that have the right to live in these waters. We depend on them for a balanced world and	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ecosystem. I grieve to think of the pain and suffering these beautiful, amazing, intelligent creatures will endure due to your training exercises. PLEASE revise your plans, and take into greater consideration the importance and worth of these creatures, and the responsibility we have as humans to make sure our actions don't cause undue, unnecessary, and uncaring harm to those we share the earth with. I have faith in your capabilities to make a different, more compassionate, and more sensible plan. Thank you.	Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
James (Electronic)	This training program is both devastating and unnecessary. The projected mortality rates are staggering. The number of animals left deafened will slowly starve. The impacts of this kind of testing are well documented in numerous studies. These impacts are far ranging and are damaging and lethal to ocean life -- from fisheries to marine mammals to all kinds of flora and fauna in the ocean. The only responsible action is to not use this lethal technology.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy has conducted training in these operating areas regularly for approximately 60 years. Though the intensity of live training will increase, the events are of relatively short duration and therefore the Navy does not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear midand high-frequency sound sources which make up the majority of sound producing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Janton (Electronic)	ALOHA...I am a long distance swimmer on the Na Pali Coast of Kauai. The date of June 11,2012 I was swimming from Miloli'i to Polihale when I heard thunder under water....what was that....my kayak escort man heard the thunder too , he thought it was real thunder over by the island of Ni'ihau. I was concerned. Later that same day, back at Miloli'i beach a group of us heard the "thunder" again and again. Then we saw he big grey ship over in the water west of Polihali. The sound of just that kind of booming was very disturbing . I was wondering why the ocean here in a marine life sanctuary would be subject to this kind of "drills". I am concerned that the tests with sonar will effect all of us who are in the sea, swimmers, divers, all the marine life . When the tests were done by the Navy off the Kona Coast several years ago I was in the ocean swimming. One of my fellow swimmers was damaged by the sounds in the sea coming from the Navy vessel. To this day she has nerve damage as a result of being in the water too close to where the sonar tests were being done.I wish to swim with confidence that I will not be damaged by sounds that are being tested in the sea. I am also concerned for all marine life especially in designated Marine life sanctuary areas.Mahalo.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The EIS/OEIS analysis indicates that no impact on public health and safety would result from training activities using sonar, based on the Navy's implementation of strict operating procedures that protect public health and safety. The Navy is not aware of any documented cases of sonar harming people. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Jesus (Electronic)	I just learned at the Rio+20 that the ocean is more polluted than the lands.Because we can not see what is really happening,so the marine life is suffering,with fish nets and so on,which causes the trapping of the poor animals,causing the death and suffering of the fishes.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Cayetana Johnson (Electronic)	Please, no more killing of the sea with these experiments.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Colleen	Navy Training, Please reconsider the testing mission of the live explosives and high-	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Johnson (Electronic)	intensity sonars. The animals in the ocean are far more important. Please. This is life that will be lost. Suffering that will be caused... Please.... Someone has to take a stand and save the animals. They are all apart of the bigger picture. We are all interconnected. As we destroy species after species, we are destroying ourselves... We may not see the impact in this life, but it does exist. Thank you, Colleen Johnson Sebastian, FL	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Johnson (Electronic)	Yes, Please stop the Sonar Sea Testing, for this is not good for our Sea Creatures ... Put yourself in their place ... would you want to live in an area where testing is done where you live, eat, sleep??? Gratitude for what we have received as gifts in many forms on this earth brings more benefits to mankind when we carry this Attitude/Mindset. Please Find Healthier Alternatives. Thank You, Sincerely, Dody Johnson	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
J. Johnson (Electronic)	Please don't use sonar and explosives that will harm marine wildlife.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Johnson (Electronic)	Almost everybody agrees that we need a robust and strong Navy to protect national security. And almost all of us agree that whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. But a recent proposal from the federal government tries to make Americans pick between these options, and it's a false choice. The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Please protect marine mammals from explosives and sonar along the East Coast and California/Hawaii. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree.	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Johnson (Electronic)	I just want to express my concern for the dolphins, whales and other marine life affect by your under-water testing. There must be a better way than to harm these beautiful, innocent beings. Please consider alternatives and/or whether this testing is absolutely necessary! Thank-you!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
T. Jones (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Jones (Electronic)	Why is it ok for this gov'ment to do whatever they want, when they want. This is not money well spend.	Thank you for participating in the NEPA process.
Jose (Electronic)	I know Navy sonar testing is necessary to protect Americans, but please limit testing around known cetacean migratory paths (geographically and seasonally). Whale watching boats, fishermen (both recreational and commercial) and scientists are a good resource for that information. Please use passive sonar to check for any cetaceans in the immediate area before testing and the animals will thank you for saving their lives! Thank you for your time, Cherilyn Jose	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Joseph (Electronic)	I'm writing to ask that you please stop the sonar that is killing mammals in your test areas. We went from 155,000 incidences to the potential for millions of times per year? Unacceptable. I live on the West coast and want future generations to be able to love the oceans, whales, and dolphins, that I have been able to enjoy.	he Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Of the millions of annual exposures resulting from the Navy's proposed training and testing activities, nearly all are expected to result in "Level B harassment," defined as harassment that, "disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering to a point where such behavioral patterns are abandoned or significantly altered." Only Level A harassment would have the potential to injure a marine mammal. As described in the Draft EIS/OEIS, marine mammals would potentially be exposed fewer than 1,000 times annually, throughout the entire Study Area, to sound levels that could result in Level A harassment.
Jubran (Electronic)	Please do not deafen and kill marine life with your military practices. Why is it something you are not concerned with? Find a way to practice without hurting anything. We know you can do it with computer simulation - so why hurt our marine life? WHY?????????	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, today's simulation technology does not permit effective training and testing.
Ken K. (Electronic)	Don't do these activities if they harm living animals. You've got enough ways to kill and maim people, these tests are not important enough to kill innocent animals over. How about we do tests on you and your family? Would that be ok?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities.
Kaempfer (Electronic)		Blank
Kahele (Written)	Enough is enough – no more military. This is not America, so go home. For the record I'm against all Navy and Military here in Hawaii, it's take, take, take. No end to it. You say you're here to protect us but who is going to protect us from you? Stop already. This is Military occupation. Stolen Land!	Thank you for participating in the NEPA process.
Kaiu (Written)	Opposed.	Thank you for participating in the NEPA process.
Kaiwi (Oral-Kauai)	Aloha, my name is Ed Kaiwi. I was formally in the United States Marine Corps, Echo Company, Second Battalion. So I talked to this lady here, and she told me all about the Navy. Why are we trying to chase the Navy out of here? I just want the Navy to remove the sonar from all military ships within 300 miles within our sights. So I want to give this to the captain. This is a handbook. It says, Consultant with Native Hawaiian Organizations in Section 106, review process handling. So the Navy has to go through procedures with the Native Hawaiian Historical Preservation Officer, which I am. And then Sheryl Lovell is the other historical preservation officer for the Office of Hawaiian Affairs. So I represent the Office of Hawaiian Affairs and the Department of the Interior. So these policies and procedures things that I'm going to have Scott read after me identifying the historical properties. So the Navy hasn't identified what area, like the lady said, that they're going to test this thing. And now the whole northern islands is a sanctuary. So no military ships supposed to be in the sanctuary. So right now the Navy is violating many rules by bringing any military ship within the sanctuary area, which is the Pacific Missile Range. So the other one is adverse effect on it, and then there's how to resolve the adverse effect. What is the implementation of the MOA? The memorandum of agreement is what we need to sit down with the Navy and the historical preservation officer and the state preservation officer before anyone can proceed in whatever you're doing today. And the last part is charter Native Hawaiians and the public, so the public informant is the key ingredients in sufficient Sections 106 consulting, and the views of the public should be listed and considered throughout the whole entire process. So I'm a Native Hawaiian, and these are the public. And so the public and us are complaining about the sonar that you guys destroy it. You have called the mermaids aquatic eighth. So anyway, my time is up. And he can read the rest of this to you and follow the policies and procedures of the federal government before you even start to bring EIS in our waters. They're not allowed here and please follow the instructions. Let that be known the procedures and policies of the military. So do I.	As described in Section 3.10.1.2 (Identification, Evaluation, and Treatment of Cultural Resources) of the Draft EIS/OEIS, "Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on cultural resources listed in or eligible for inclusion in the National Register. The regulations implementing Section 106 (36 C.F.R. Part 800) specify a consultation process to assist in satisfying this requirement. Consultation with the appropriate State Historic Preservation Offices, the Advisory Council, Native American tribes and Native Hawaiian organizations, the public, and state and federal agencies is required by Section 106 of the National Historic Preservation Act. Scoping letters for this EIS/OEIS were sent to appropriate State Historic Preservation Offices and federally-recognized Native American tribes." The Navy will continue to comply with the National Historic Preservation Act.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Kaleiwahea (Oral-Hilo)	I hope that you guys understand in the three minutes that I have because one reason I'll be (inaudible). I want to ask you a question to you, you people. Do you know what Hawaii is here in the contribution to the world? Do you know what Hawaii is? Because you guys have to have an understanding that what we're here as a contributor to the world. We represent the heart in the (inaudible) system of humanity. This is why we have a culture Kanaloa. And for what you guys are doing, it's, you know, a beautiful culture that we have. You know, you guys are destroying it on the land, the water. You know, you guys not thinking. Why we're here, the way our (inaudible) put us here in this master plan because we have a culture. You guys don't. You guys are manmade culture. Ours organic. And this is why you guys got to know what we represent in this world by the system of humanity. We represent the heart, brah. This is why we (inaudible). And because you no can understand that (inaudible), you know, how we going to pull this world together? You got to understand. You see that mountain up there? That's the (inaudible), the gods. Okay? (Inaudible) has three sides that connect the four pillars of the world. You understand me? Four pillars of the world: north, south, east, west. Okay? You people come to the west, go in there. You represent (inaudible). Go into the east (inaudible). We come from Kanaloa, the living spirit over the land and the water, and we come from a culture Kanaloa. You guys have to make that connection so we can pull the world together. I'm not (inaudible). America, Japan, China (inaudible). Okay? Why? Because this reason: They're supposed to come here and understand. (Inaudible.) It's a power play, one with the (inaudible) and one with military gain. That's not the way, man. We got to pull the world together. The world is the heart, and that's what we're here for. Okay?	Thank you for participating in the NEPA process.
Kanaka'ole (Electronic)	Dear Sirs/Madams, I am strongly in opposition to any/all proposed use of the Hawaiian Archipelago as a training/test site for the US Navy et al as it is evidently detrimental to the critical habitat of these Hawaiian Islands & its' people. I am a lineal heir descendant/3rd party beneficiary of the Cleveland-Liliuokalani Assignment/Agreement who has never willingly/knowingly conveyed and/or ever been compensated for my assets (inherent vested undivided interest to what was under the lawful management of the Crown/Hawaiian Kingdom Government prior to January 17, 1893) as a matter of fact or pursuant to the law of Nations (Geneva IV & V). The Apology Resolution (Public Law 130-150) & Act 359 of the Hawaii State Legislature acknowledges the historical injustices committed upon the Crown). The Hawaiian Kingdom Government & its' People never conveyed nor have we been justly compensated for what was under the lawful management of Liliuokalani (Queen of these Hawaiian Islands). It has been reported today that the US Navy has knowingly dumped hazardous waste into Pearl Harbor (Oahu) & are being fined $80,000.00. The ridiculous fine shall not compensate or financially cover restoration/reparation of the critical habitat affected by the US Navy's illegal dumping of hazardous materials into Pearl Harbor!!! Furthermore, no consultation has ever been made with me & my ohana directly possessing an undivided interest to	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the entire Hawaiian Archipelago as pursuant to Section 106 of the National Historic Preservation Act of which compliance is mandatory!!! Whereas, I demand that all directly/indirectly concerned cease & desist immediately. Your failure to cease & desist would give cause of action for me & my ohana to file grievances with the international court of justice for cultural genocide & civil rights violations pursuant to applicable sections of Title 18; 28; & 42 of the United States Code etc!!! Please govern yourselves accordingly with due diligence!!! Aloha nui & Mahalo!!! Simbralynn Leiolani Kanaka'ole	
Kane (Electronic)	Please do not continue with your sound testing in the Pacific	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kastel (Electronic)	Almost everybody agrees that we need a robust and strong Navy to protect national security. And almost all of us agree that whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. But a recent proposal from the federal government tries to make Americans pick between these options, and it's a false choice. The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. We understand the need for	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, porpoises, and many other marine creatures. We are asking the Navy today to protect marine mammals from explosives and sonar along the East Coast, and California and Hawaii. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. PLEASE CARE ABOUT THE MARINE LIFE! HAVE MERCY! BE RESPONSIBLE!	pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
D. Katir (Electronic)	I respect the thought and care you are using in your efforts to make our country safe and also for your efforts to reduce any adverse effects to wildlife. However, I ask that you please find a method, a time, or a location that will result in few to zero fatalities or injuries while you strive to achieve your goals. All marine life is in need of our protection, but especially sea turtles, whales and beaked dolphins. Please do not seek to use methods that have adverse effects on marine life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
U. Katir (Electronic)	First, I praise you for inviting comments. Please help us to understand why using potentially lethal testing methods is necessary. I hereby state my objection to any sonar testing that would damage whales, dolphins or any other sea creature sensitive to such testing. Please DO NOT DO THIS!!! Is there another way? Is there another location? Please help the public to understand what you are doing! Again, thank you very much for allowing the public to comment. I just wish I had known sooner. You have my phone number, please call if you have any information that will help me to understand. I appreciate you and pray that everyone's needs can be met. Very best regards, Usha Katir	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kaur (Electronic)	To whom it may concern, Sometimes as an individual one feels very impotent to stop an exercise of this magnitude. All I want to remind the people behind this is that we are NOT alone on Earth. The continuance of life on Earth requires balance and respect to all those we share this planet with. In the name of progress we ignore the collateral damage we cause but we don't realize that the Earth has a pulse too and it has reminded us, through Tsunamis and Earthquakes and disasters of horrible magnitudes, that payback is tough. So lets respect non-humans on Earth and not inflict such damage on them. Best, Simran	Thank you for participating in the NEPA process.
Keanu (Written)	Opposed.	Thank you for participating in the NEPA process.
Keeble (Electronic)	I'd appreciate it if you didn't test your sonar and explosives in proximity to defenseless marine life. C'mon, with all the pollution and overfishing those guys have a hard enough time getting by as it is don't you think? Do we have to be the planets biggest a-hole neighbor every time?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The Navy has conducted training in these operating areas regularly for approximately 60 years. Though the intensity of live training will increase, the events are of relatively short duration and therefore the Navy does not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear midand high-frequency sound sources which make up the majority of sound producing activities.
Keefauver (Electronic)	Please put the safety of the whales & dolphins first and keep your testing off the shores of Hawaii & California.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Keller	This is too high a price to pay. You know how the animals will be damaged. The damages will be in effect for many years in some cases. Spend the money to go	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	somewhere less harmful if this "testing" must be done. Frankly, you people are not dumb. Why can't you figure out a way to test your merchandise without the harm? This is too high a price to pay.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
A. Kelly (Written)	Opposed. I'm opposed to the use of High frequency Sonar. I further believe that this EIS is incomplete as it does NOT mention the effects on Humans Due to the impact on the sea reafs and animals. There is no mention of Cultural or food impacts as a result of High frequency Sonar.	This EIS/OEIS fully analyzed all impacts to the human environment. The reasonably foreseeable effects to coral reefs and other marine species were analyzed in Chapter 3. Impacts to cultural resources were analyzed in Section 3.10 (Cultural Resources) of the EIS/OEIS.
G. Kelly (Oral-Hilo)	I'd just like it to go on record that I'd like the meetings to go back the way they were, where we were able to reach the whole public and not just the choir so that we can reach out to our community, and I feel like this is a suppressive tactic even if it wasn't intentional. On the first introductory panel that declares your mission, one of them is to "maintain, train and equip combat-ready military forces capable of winning wars." I just said to myself, wow, imagine if you went up to the pearly gates and they said, "Well, what was your mission in life?" and you said, you know, "I'm capable of winning wars." I wonder how that would go over with the Creator. And I looked at that word, military forces. Two syllables in forces. What's the first syllable? That's got to tell us something. Force. In regards to the environmental studies, most of these studies have kind of failed the people. You know, we may be thrown a crumb once in a while where they'll save a bird or a patch of habitat, but for the most part our wishes are overridden while military	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	toxins continue, everything from heavy metals to depleted uranium and to unexploded ordnances. So even though we're here for an environmental study, I can't detach that from the bigger mission, which I see as empire-expanding. And by empire, you know, okay, U.S., NATO, Israel kind of joining forces to dominate the rest of the world one country at a time, Iraq, Afghanistan, Egypt, Libya, Pakistan, Syria, with the intention of circling of course some nations that still show some independence like Russia and China, all moving towards the ideal of globalization, which steals every country's sovereignty. And we will be then led by leaders in the U.N. half a world away, whom we have not elected, and have less of a voice and less local authority to decide how our lives are led. And now going into Mother Africa, and we know that it's about resource grab, about owning the oil and owning the water and owning the ports and the poppies, the heroin poppies and the opium poppies and every other resource out there. And so when I talked to everyone here, everybody was passing the buck including you, sir. You said, "We do not make the decisions," but you do serve those who make the decisions. And I guess the last part of what I want to say is outreach to those of you who are holding up the military killing machine because I see it as such. You choose to settle conflicts by taking lives, and that's a very primitive way to advance civilization. Please think about our words tonight. We're reaching out to you. We'll be here for you if you decide on a different course in life. It's not too late.	
Kemp (Electronic)	Please do not do this!! Stop the testing...NOW!	Thank you for participating in the NEPA process.
Kendrick (Electronic)	Please do not endanger the hearing or lives of whales and dolphins. Isn't there another way?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Kenzie (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kenzie	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		accessible on the NMFS Office of Protected Resources website.
Kershner (Electronic)	as vast as the oceans may seem to us landdwellers, for many creatures, it is their only home. please consider the following steps to reduce the harmful impacts to marine mammals: avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ketcherside (Electronic)	Almost everybody agrees that we need a robust and strong Navy to protect national security. And almost all of us agree that whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. But a recent proposal from the federal government tries to make Americans pick between these options, and it's a false choice. The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Khomyakov (Electronic)	I am saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. I look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact me.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kieckhefer (Electronic)	I am shocked and angry that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5 million instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that a cetacean with a permanent hearing loss is a dead animal as whales and dolphins depend on sound to navigate and live. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals. Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and	There are several contributing factors that make it inappropriate to compare takes from previous studies: • An increase in training and testing activities and the inclusion of more activities and sources to meet emerging requirements. • Combined geographical areas (areas not previously analyzed) • Updated marine mammal density information • New acoustic effects model • New acoustic threshold criteria extended the ranges to effects of sound sources and result in higher numbers of predicted level A takes. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must take steps to significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	
Kingsley (Electronic)	I'm concerned about the harm potentially caused to marine mammals by your project. Surely it would be unthinkable for someone to come to your home and deafen your family members. Why then is it acceptable to do it to another species? Because they don't talk? Because they don't vote or have any influence? Are any species other than humans at risk from other "projects"? We are not being good custodians if we think we are so far above everything else that lives here that we can't be compassionate and use restraint when we exert our "supremacy" over other life forms. These creatures were here long before humans but we think nothing of harming them to advance ourselves. They need their hearing to eat, mate, communicate...all the things we do without a second thought. What if those things were taken from us through no fault of our own but by a, supposedly, more advanced society? We have no more right to harm another than they have to harm us. I know I sound like a bleeding heart hippie or something. I may be but I'm trying to give a voice to those we can't understand. Shouldn't we side with compassion and respect instead of arrogance? Thank you for your time. Sincerely, Michele Kingsley	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Kirch (Electronic)	Don't kill & or deafen innocent animals for testing, please find a better way.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Kislak (Electronic)	As a taxpayer and supporter of the U.S. military, I implore you to please NOT destroy or injure in any way any marine animals with naval (or other) exercises. It is an abomination in the eyes of God. You MUST figure out a way to exercise military hardware and forces WITHOUT significantly damaging ANY of God's creatures. I am generally in favor of national defense exercises, and I understand collateral damage during war, but killing and injuring simply for exercises is a sin of the highest magnitude.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Kitch (Electronic)	Please do not threaten the lives of whales and dolphins on East Coast, California, Hawaii by conducting experiments using explosives and sonar. This is unacceptable and unnecessary. Please take into consideration and develop another plan.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Kivlen (Electronic)	Whales and dolphins depend on sound to navigate and live. Please stop the useless killing of 1,800 whales and dolphins and the deafening of 15,900 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands, the California and Atlantic Coasts, and the Gulf of Mexico. The use of high-frequency underwater sound testing should be better managed by working with Environmental groups. The Navy should plan to test during a safer time period, or if necessary stop the testing completely if it can't be done without harming thousands of whales & dolphins.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Klick	The proposed plan is indefensible from the point of view of putting at risk many	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	thousands of marine mammals, who are considered by leading scientists to be sentient and self-aware. A similar proposal that involved the planned death of 2000 primates, many of endangeded species, along with irreversible damage to tens of thousands of others would never even be considered. If indeed these exercises are important to our future security, it is imperative that measures be taken to minimize the impact on marine manmmals. These measures could include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Knable-Crook (Electronic)	I realize your work/testing is critical. But so is the survival of these wondrous creatures... please, please pursue alternative solutions to actions that will inflict such pain and devastation. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Knight (Electronic)	Hi, I am opposed to this testing based on the environmental impact on marine wildlife such as whales and dolphins. The Navy should be able to find ways to operate without harming the environment!!!! Theresa Knight	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Kocsis (Electronic)	I am commenting to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
L. Kocsis (Electronic)	I am commenting to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kohn (Electronic)	Please protect our seas and precious sealife from military proliferation. We need to live in harmony with all species. These practices would deafen and kill sea mammals and the longterm effects on the oceans are really unknown. Especially important to protect migrating whales and our beloved dolphins. There is no need for such a large area. Please, protect our seas!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Kolons (Electronic)	Enough is enough. It's been proven that sonar is deadly to marine mammals. It's there home, not ours. Get real and stop this unessacary torture of these innocent marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Koopmans (Electronic)	plz do not do this its to cruel we need Animals on this world	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Korhonen (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the above, if you have any queries please do not hesitate to contact us, yours,	[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kozin (Electronic)	As important as your mission is it is equally as important that we protect innocent and peaceful creatures. It is our responsibilty as stewards of this planet to not them cause harm.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Krinsky (Electronic)	Marine mammals live in the ocean. They do not have a choice on their location of residence. They rely on their sense of hearing to survive in their native environment. Sonar interferes with their ability to live. Every technology invented by humans has an impact on the world. Some of these impacts turn out to be severely negative consequences that were unintended but very real. When that occurs, it is incumbent on mankind to change its implementation of those technologies to mitigate the harm done to other beings or the environment. We now understand the destructive impact of sonar use in areas of high marine mammal activity, particularly in the areas off of Southern California and Hawaii. We should develop and use alternative technology in these areas at the very least, but also in other sensitive areas to ensure that other species have the right to live their lives in a safe, peaceful and positive manner without the kind of unnatural interference provided by our deployment of the sonar technology in their homes and feeding and breeding grounds.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy employs new technology where feasible to reduce impacts. One example is the use of passive sonar to listen for the presence of marine mammals prior to starting a sonar activity.
Kronsnoble (Electronic)	I am outraged that the Navy is planning an operation which will harm dolphins and whales not to mention other creatures in the ocean. Please do not do this!!! It is just wrong.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Kujanson (Electronic)	Please reconsider your testing where dolphins and whales are put in danger of losing their hearing and lives. I am so appreciative of our freedom and soldiers. And so proud. But this is nothing to be proud of. Please do not do this.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lafferty (Electronic)	Please consider protecting marine mammals from sonar exercises and explosives in order to reduce the harmful impacts to these innocent creatures. As a patriotic American, I support the US Navy but without consideration and respect and for these majestic beings, we are engaging in what seems like an outdated and cruel practice. Certainly, as a nation, we are better than that.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Landsberg (Electronic)	I am writing to ask the Navy to please implement all protective measures while using sonar and explosives in areas where marine mammals live. We know the harmful effects sonar and explosives have on marine mammals and we need to make sure we protect them in the process. Thank you, Marisa Landsberg	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
A. Lane-01 (Electronic)	Please do not conduct training exercise along the US East Coast or off the coasts of California and Hawaii. Your own environmental studies indicate that a large number of marine mammals including some endangered species will be impacted negatively, even killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any prediction of mortality made by a model is only an estimate.
A. Lane-02	With the technology that our nation possesses, we can certainly find more humane and ethically/environmentally responsible ways to test live explosives and high-intensity sonar. I urge the U.S. Navy to listen to the majority of the public and use and observe protective measures in your testing excercises-all creatures on this earth have a right to a peaceful existence. April Lane Whitefish,MT	Currently sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
K. Lane (Electronic)	STOP UNDERWATER SOUND TESTING!!!	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Lang (Electronic)	I urge and request the US Navy to adopt safeguards during sonar training. The upcoming testing, please protect Whales and Dolphins. I know there must be ways to keep our country safe WITHOUT torturing non human life. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lauer (Electronic)	I am urging you to consider steps to reduce the harmful impacts to marine mammals when conducting training exercises. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Many animal welfare organizations, including The Humane Society of the United States, are happy to work together to come to the best, most humane solution for all. Please explore all options before sacrificing the precious species that call our oceans home. Thank you in advance for your compassion.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Leach-01 (Electronic)	Don't do it! Lives are at stake, not human, just as meaningful.	Thank you for participating in the NEPA process.
Leach-02	Please don't do it! We have done enough to destroy, then try and save sea life!	Thank you for participating in the NEPA process.
Leder (Written)	Opposed.	Thank you for participating in the NEPA process.
A. Lee (Electronic)	For me, part of being an American is knowing that our actions are what make this country great. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Thank you, Andrew Lee	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
C. Lee (Electronic)	Please protect animals during training exercises.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Lee-01 (Electronic)	Humpback Whale Breaching Photo: Thomas R. Kieckhefer I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Lee-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
R. Lee	To Whom It May Concern, We just returned from a vacation to Texel, a small island in north Holland in the North Sea. Walking along the beach one evening we found a dead,	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	beached harbor porpoise. The entire time we stayed on the island, we observed construction in the water near the beach. There is no way to know if this had anything to do with the porpoise's death, but it was clear that it significantly affected the environment these beautiful animals live in. It is disturbing to know that in our home state of California, our own government is considering activities that will risk the health and lives of marine mammals, such as whales and porpoises. Our son's second grade teacher took her class to Point Reyes, CA in the spring to show them the migrating whales. The class counted a number of whales together and returned home with beautiful images and stories in their minds. These are the very whales that would be affected by the Navy's tests. I urge you to please consider alternatives to the planned testing, that would allow these animals to continue living in our waters unharmed. With much appreciation, Dr. Ria Lee	Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Legere (Electronic)	To the Navy, Please stop murdering the sentient beings of the oceans. Stating you are doing it for our defense makes no sense and only proves how insane or rather unsane your department is. Murdering divine beings protects no one, it only endangers the planet even further. Stop this horrid practice now! Have you ever heard of karma (cause and effect)? Saying you are just following orders is not an excuse and does not protect you from your cause and effect.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Leland (Electronic)	Considering the state of the world's oceans this exercise is irresponsible if not completely moronic. And why can't these exercises be conducted in simulators or with as little negative impact as possible? Monstrous.	Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, today's simulation technology does not permit effective training and testing.
Leo (Electronic)	This is truly outrageous! Please, I am asking the Navy to consider steps to reduce the harmful impacts to marine mammals. We must value and preserve our oceans and the marine mammals that inhabit the ocean, in addition to protecting our national security. There must be a balance. Please avoid the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; create a larger "safety zone" around the exercises; and use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thank you for the consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Leonard (Electronic)	I urge finding in favor of the No Action alternative. Multiple past studies and environmental assessments have found that current levels of Navy training and testing activities do have detrimental effects on marine resources' including on protected and endangered species. These include some with permissible takes of zero. Any increase in training and testing levels' or increase in use of active sonar would result in greater impact than current' and would be contrary to National environmental laws.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lerandeau (Electronic)	We will always have the military and their various war games. If we are not careful, we will NOT always have dolphins, whales and other sealife. The Navy must stop their sonar testing if it will damage or kill sealife.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lett (Electronic)	I am truly saddened to learn that the US Navy is planning to use live explosives and high intensity sonar that will affect the lives of 2000 marine animals. I have seen programs about marine mammals affected by navy exercises involving the use of explosives and that footage is highly disturbing as it highlights the effect such equipment has on marine life. In addition, the US Navy is carrying out these exercises without any regard for the marine life that is being affected in other countries by the use of it's sonar equipment. It is well documented that sound channels in the sea allow sound to travel over vast distances. Other countries deserve to be made aware and consulted about the US Navy's exercises. Please consider this matter seriously the Navy's actions impact upon lives of so many marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Levine (Electronic)	Please do not do this. Our marine mammals are so precious and are such an important part of the greater ecosystem. We've already done so much damage to our oceans and the life there -- we should be doing everything we can to return the ecosystems to their previous state, not destroy them further.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Levine (Electronic)	I urge the Navy to limit the number of sonar exercises which negatively effect marine mammals. Evaluating necessary vs unecessary testing is a fair compromise between the navy & environmental groups. These magnificent animals play a vitally important role on earth. Disrupting their enviornment , in such profound ways, is inhumane. We are the stewards of this planet and are responsible for protecting all of the earth's creatures. I hope that the navy makes sound decisions based on good science, and with the assistance of marine experts, so less stress is placed on the oceans ecosystems, which are so important to life on earth. Thank you.	The Navy's requirements for training and testing have been developed through many years of iteration to ensure Sailors and Marines are prepared to properly respond to the many contingencies that may occur during an actual mission. These training requirements are designed to provide the experience and proficiency needed to ensure Sailors are properly prepared for operational success. Current testing levels are necessary to provide safe, reliable, effective systems to Sailors. There is no "extra" training or testing built into the Navy training and testing program. Any reduction of training or testing would impede the Navy's ability to achieve the levels of certification, proficiency and readiness required to accomplish assigned missions.
Levitt-01 (Electronic)	This comes up year after year. Please understand something. We, the concerned, care for the safety and preparation of the US Navy. AND, we accept that we (humans), MUST act responsibly regarding our actions here in relation to ALL who may be effected by it. You need to train. You also need to find a way to do so without bringing harm to the creatures with whom we share our waters. We aren't better or more important than them and we haven't the right to disregard their lives in pursuit of our own aims.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Levitt-02	We need to find a solution that works, and if that involves taking a radically new approach, applying innovative, out-of-the-box thinking to this problem, then it's about time. This principle is universal. No culture or industry ever survives, let alone thrives, without seeking to improve itself. And these improvements must benefit themselves as well as all others effected byit their endeavors. If it doesn't, it is doomed to failure and will, inevitably, cause a de-evolution of all those associated and effected by it. So. DO	Currently sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	you think you're able to access the genius required to come up with such a solution? I think you are. To do so, you'll have to fore-go your traditional approach to problem solving. Please, please, show us what you're really made of. Show us you're more than grunts with guns. Help us to remember that you are in fact intelligent, motivated, inspired protectors of things good in this world. Show us that you've found an elegant, brilliant, remarkably effective solution to this and we won't just get out of your way, we'll help you along. Can you imagine that? When you can, you're on the right track. in gratitude, Jason	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
J. Lewis (Electronic)	Please protect the future of our wildlife.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
O. Lewis (Electronic)	We are saddened to hear that they Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Olivia	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Lewis	
S. Lewis (Electronic)	I strongly oppose any further sonar testing in our ocean waters. This testing is repetitive and unnecessary. The resulting stranding and deaths of marine mammals in these kinds of numbers is totally unacceptable. Whales and dolphins are aready struggling to survive the existing global human impact, and there is no justification for the amount of anticipated deaths. The military should not be given any special permissions to kill federally protected marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Li (Electronic)	I have heard through the Humane Society that the Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. The Navy proposes the use of live explosives and high-intensity sonar. Your own Environmental Impact Statements estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. How is this justifiable? This is unacceptable and horrific. These intelligent, sensitive creatures do not deserve to have their habitat recklessly destroyed and their lives impacted by unnecessary training exercises in their area. There must be a better way. Please consider steps to reduce the harmful impacts to marine mammals. Please avoid areas used as calving grounds or migratory corridors; avoid seasonal high-use feeding areas; create a larger “safety zone” around the exercises; and use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please have compassion.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lilja (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Louise Lilja	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lima (Electronic)	This testing is appalling!! And not moral in any form. No testing is worth many innocent lives and any living being. You all must find an alternative! We will not stand to let this happen to innocent marine life!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Lincoln (Oral-Oahu)	My name is Lancelot Haili Lincoln. I am a direct descendent of Kamehameha I. If you look at the crescent of our royalty, the two twin brothers you see there, this is my family. My question to the Navy is when are they going to clean up Kahoolawe, which they have been bombing for many years? Another question I have, when are they going to clean up that oil spill over there at Pearl Harbor at the war memorial? Please, you make a mess in our islands, you must clean it up. You destroy the islands by bombing our islands, Kahoolawe, please, now you must clean it and make it the way it was when you first started. Pearl Harbor, that ship is still leaking oil. Anywhere in the world a ship dumps oil, everybody comes in to clean it up, environmentalists are all over these people, like BP. Please, clean the oil spill up over there at Pearl Harbor so we can -- again one day hopefully my grandchildren can eat the oysters that come from Pearl Harbor, Ewa Beach, Waipahu, like I did when I was a child. Now, my keiki, my children, and my grandchildren, my opio, they are not able to eat these urchins from these areas because of the destruction and oil spill from these ships. Please, you created this disaster, please clean it up for us. That's all I ask, Captain Nicholas. Thank you very much.	Thank you for participating in the NEPA process.
Lindsay (Electronic)	Crimes against the earth are crimes against humanity. What you do to the earth, you do to the people. We are all ONE. This is a human rights issue because EIS/OEIS is destroying life on earth. Protecting life, means protecting each other. Do no harm.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Linzer (Electronic)	I am upset that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. There must be reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Whales and other ocean animals are already at risk from the changing acidity in the ocean. Please help keep them safe for the years they still have left in the ocean. Thank you. Mary Linzer	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate.
Livesey-Fassel (Electronic)	With great respect for all the Navy in particular and the military do to protect USA citizens may I please beg and plead that you consider the harm that is done to dolphins and whales in some of the excercises that harm their guidance systems! We MUST consider the great benefit of these creatures to our World and not destroy them in the process. Thank you!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Locascio (Electronic)	Has an analysis indicated the level of sonar testing that will have a minimal effect on marine mammals? With all of the scientific brainpower and experience concerning sonar testing they should arrive at an environmentally friendly solution. Has consideration been given to conducting sonar tests in waters avoiding marine mammals?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, during its training and testing activities. The Navy has conducted active sonar training and testing activities for decades in the seaspace depicted in the Study Area with no documented proof of injuries to marine mammals.
Lochlaer (Electronic)	Cetaceans are facing many threats: hunting, pollution, loss of food sources (due to overfishing by humans). We should not be adding to their problems. The relationship between sonar and stranding events is already documented. I know that the Navy's intentions are noble and honorable. But the cost in cetacean lives will be too high. Please abandon your plans to conduct these exercises.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Lockhart (Electronic)	I am concerned about the impact the upcoming training exercises will have on marine life off the coasts of California and Hawaii. Please consider using protective measures when conducting activities that will harm or kill the marine mammals that many Americans appreciate and respect. Thank you for considering my comments.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Loe (Electronic)	Please do the right thing and respect our oceans. The living organisms are more allowed to exist than us even. They do nothing but mind their own business and we do nothing but hurt them and their environments. Please again, do the right thing and leave the oceans alone. Spend less on war and more on friendships. It is possible.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Loew (Electronic)	I urge you to protect Pacific marine mammals from injury & death by NAVY Sonar Weapons testing. Underwater sound systems damage and destroy organs that whales and porpoises need to survive. The under-ocean noise literally blasts apart the delicate fluid sacs (similar to our human ears) and makes the whale and other sea mammals unable to hunt which is essentially a death sentence. Projections indicate that 11.7 Million mammals would be affected. Please rule on the basis of reason and human conscience, not in response to an unconscionable escalation of military might. We have no looming threats being made by sea that require such magnitude of testing, and this particular plan's ramification is unacceptable.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Logan (Written)	Opposed.	Thank you for participating in the NEPA process.
A. Loggie (Electronic)	Please protect all animals when testing your sonar and explosives. NO animal should die when you are testing. That is not fair to them. THANK YOU!! Anneke	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
M. Loggie (Electronic)	Please don't kill a bunch of Animals just so you can be "prepared" for a fight.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Longa (Electronic)	Please stop conducting sonar training and testing exercises which are endangering millions of marine mammals. These unnecessary practices are destroying our environment and wasting tax payer money. I am sickened by the thought that my hard earned money is being wasted by the Navy to conduct experiments that are killing and maiming endangered species.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lopatka (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Trina Lopatka	Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Lopez-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Lopez-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		accessible on the NMFS Office of Protected Resources website.
J. Lopez (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. We MUST protect marine mammals from explosives and sonar along the East Coast» and California/Hawai. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lord (Electronic)	I am opposed to any testing or other process by the US Navy that puts our valuable sea creatures at unnecessary risk. Whatever the purpose for this "testing", it should not interfere with the health and safety of ocean creatures. I'm sick of hearing how my own government kills, wounds, and maims creatures for 'science' or 'necessary drills'. You do not have to right to kill indiscriminately in the name of progress. You will not use my tax payments for any more deadly ventures. How about making sure you are not in an inhabited area, or find some way not to harm dolphins and whales with your deadly devices.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lotts (Electronic)	Please stop this madness. There are other ways of testing, please don't kill marine mamals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Lucas (Electronic)	How absolutely absurd that we would allow such a heinous act to even make it this far. What evil men propose such cruel displays of 'muscle'? There will be no hope for mankind as long as our military and leaders are allowed to act as such, with such disregard for our Oceans and the beautiful, feeling beings which live there. I believe you may have no souls, I will never stand behind our government until you start acting appropriately and decently. Shame on you! The government keeps waving their 'one nation under God' flag around but more and more are starting to realize who the real enemy is. You harm Gods creatures and destroy this beautiful planet with every act, the consequences will be dire. "Thou shalt not kill." No exceptions!!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Lucky (Electronic)	I am concerned about the impact of this sonor on our sea life. I hope that more testing can be done to determine the effect upon sea mammals and the use of any device be postponed until some less harmful device is invented. I believe in the USA and its protection but hopefully we can also avoid killing the wonderful creatures of our planet except during unavoidable wartime. This sounds excessive.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Currently sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Ludwig (Electronic)	We don't need to hurt marine mammals in order to stay ready to defend our country. The thinking that says we do, is thoroughly mistaken.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lunardi (Electronic)	Please do not let our precious marine animals die from your experiments. Please have a conscious.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
L. Lynch (Electronic)	I am writing to The Navy requesting that you include my comments on your Environmental Impact Statement (EIS) re: the use of high frequency underwater sound for testing in Hawaii, the California and Atlantic Coasts, and the Gulf of Mexico. According to your estimates it will deafen more than 15,900 whales and dolphins and kill 1,800 more over the next 5 years. Whales and dolphins depend on sound to navigate and live. I am requesting that you please reconsider your Naval program, and save the lives of these ocean creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. As noted in the Final EIS/OEIS, the design of the modeling and input factors has insured that the quantification of effects to marine mammals is a purposefully conservative overestimate of impacts. The impact analysis in the Final EIS/OEIS has been refined in coordination with NMFS. The number of marine mammal harassment exposures is only an estimate, not a prediction. The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
S. Lynch (Electronic)	Please do all that you can to minimize the effects of sonar testing on marine wildlife. The reports that have been aired on reputable programs like the Today show indicate that temporary or permanent hearing loss among marine creatures that depend on their own sonar for navigation is likely, by your own estimates, in an enormous number of animals. The numbers are unacceptably high, and by working with other agencies (governmental and private environmental), you can significantly reduce the negative impact and still conduct the necessary research to protect our service men and women. Thank you! Susan Lynch	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lynne (Electronic)	I wish to state that the use of sonar testing in the pacific waters and the damage that will be done to marine life because of it is not okay at any level with this tax payer. I believe that if it were to be put to a vote at a national level that this would not be something that the citizens of this country would support. We do not want the endless wars either on our fellow human beings and we do not want it waged on our fellow creatures of the sea. Jefferson stated that taxation without representation is tyranny. Stop the tyranny of the military industrial complex and listen to your citizens!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Lyter (Electronic)	U.S. Navy needs to re-think its plans and to incorporate additional protective measures. It is inhumane to harm the whales and other sea creatures. do what is right, please.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Maat (Electronic)	I have learned that the Navy is proposing to conduct training exercises that would involve the use of live explosives and high-intensity sonar and would kill up to 2,000 marine mammals. Please reconsider and do not do these exercises. For what? So many creatures are risk to be killed, maimed and/or otherwise disabled. Do don't this please. Leave nature alone. Thanks, Doris Maat	See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Macey (Electronic)	This meeting was a disservice to the public. Nowhere was the true reason spelled out for the public as to what is being done or why. This meeting was called I assume because it is required for public notification but there was no notification here. Several pretty displays that do not say anything or educate the public as to what is really going on here. How about you redo this meeting and actually inform the public and allow the public to respond with questions. This format is very deceptive for the public by seeming to provide information but not doing so. I would like for someone in charge of this project or a decision maker to actually give an informative brief to the public and allow the public to respond to them. What does this project entail? How does it really affect the public and environment? That's nice that the Navy recycles their oil and is trying to be a good steward for the environment but what does that have to do with this project. I have more questions now then when I came about the true nature of what this project is.	The specifics of the Navy's Proposed Action were described in Chapter 2 (Description of Proposed Action and Alternatives) and Appendix A (Navy Activities Descriptions) of the Draft EIS/OEIS. Due to the large number and variety of activities proposed, the EIS/OEIS is the best source for the detailed information. The intent of the public meetings was to provide an overview (through the posters and handouts), and also to allow an exchange of information with the subject matter experts on hand.
MacInnis-01 (Electronic)	Dolphins and whale mothers use sound and echo location to communicate with their babies. The Navy will literally be ripping apart family units if it tests in sensitive areas. The whole process smacks of a disregard for life on this planet, not protection. It's shameful.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ma---	Opposed.	Thank you for participating in the NEPA process.
J. Madela (Written)	Opposed.	Thank you for participating in the NEPA process.
P. Madela (Written)	Opposed.	Thank you for participating in the NEPA process.
Maish (Electronic)	It is with disgust that I look out on the ocean and know that the plans to obliterate the lives of thousands of whales and dolphins are being set forward. This world has dangers and I am proud our Navy protects us from them, however, it is not a better world with this complete disregard for aquatic life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Makely (Electronic)	Please find another way to test. Do not harm our wildlife!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Mancini-01 (Electronic)	Please, do NOT do the testing. Earth is not ours to destroy. We MUST protect the environment and all the living creatures. It is unacceptable to go through with these tests knowing whales & dolphins will be harmed. Stop now!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Mancini-02	Whatever cost/ benefit analysis you did, your numbers are wrong! The cost is unfathomable!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Mandell (Electronic)	Hello: I am writing because I strongly oppose sonic testing. Animals exist in their own right as individuals pursuing their way of being, which is no more or less sacred and holy then yours or mine. My most recent concern is Decompression Related Embolism in Stranded Whales and Dolphins, which occurs exclusively due to the US Navy. I am a citizen. I do not support cruel and grievous conduct to human or non-human creatures. Moreover, means do not justify ends - even when those ends may seem justifiable to those employing unjust means. I do not support hurting or violence towards others, human or otherwise. I appreciate a strong defense but not one that disrupts, upsets or destroys others, human, non-human, plant, mineral, rock, water or soil. I look forward to your response. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mangan (Electronic)	Stop the killing of and or potentia1 killing of 1,600 whales and dolphins and the deafening of 11,200 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands and California coastline. Or anywhere else for that matter. It's 2012 - catch up with technology and adapt. I can't even believe I have to state the obvious.	See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any prediction of marine mammal takes is made by a model and is only an estimate.
Mann (Electronic)	I am very concerned about what the naval testing will do to sea life, especially whales and dolphins. Please do not let the sound testing happen.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Scarlett Manning (Electronic)	Please do not hurt or kill our marine relations, It will not only hurt them but ultimately will have such a strong and a far reaching effect for the whole planet. There needs to be limits for scientific advancement and in this case not only will they suffer the consequences, but we, as a human race will too. We are all interlinked. That's why they are called our relations. Please, Please, Please protect them from explosives and sonar.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Scott Manning (Oral-Kauai)	All you talking back there, can you mellow out for a minute. Thank you. Everyone came to listen. I'm just going to follow up with Uncle Ed here with Section 106 regulation summary so everyone understands what that is. Who's interested in that? Anyone interested in that? All right, cool. For the record, Section 106 of the National Historical Preservation Act of 1966. NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP revised regulations, protection of historic properties, 36 CFR Part 800, became effective January 11, 2001, and are summarized below. Initiate Section 106 process: The responsible federal agency first determines whether it has an undertaking that is a type of activity that could affect historic properties. Historic properties are properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. If so, it must identify the appropriate state historic preservation officer, tribal historic preservation officer, SHPO, THPO, to consult with during the process. It should also plan to involve the public and identify other potential consulting parties. If it determines it has no undertaking or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further Section 106 obligations. Identify the historic properties: If the agency's undertaking could affect historic properties, the agency determines the scope of appropriate identification efforts and then proceeds to identify historic properties and the area of potential effects. The agency reviews background information, consults with the SHPO/THPO and others, seeks information from knowledgeable parties and conducts additional studies as necessary. Districts, sites, buildings, structures and objects listed in the national register are considered. Unlisted properties are evaluated against a National Park Service's published criteria and consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that may attach religious or cultural importance to them. So I know I just have a few seconds here. But public involvement is a key ingredient in successful Section 106 consultation, and the views of the public should be solicited and considered throughout the process. The regulations also place major emphasis on consultation with Indian tribes and Native Hawaiian organizations in keeping with the	As described in Section 3.10.1.2 (Identification, Evaluation, and Treatment of Cultural Resources) of the Draft EIS/OEIS, "Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on cultural resources listed in or eligible for inclusion in the National Register. The regulations implementing Section 106 (36 C.F.R. Part 800) specify a consultation process to assist in satisfying this requirement. Consultation with the appropriate State Historic Preservation Offices, the Advisory Council, Native American tribes and Native Hawaiian organizations, the public, and state and federal agencies is required by Section 106 of the National Historic Preservation Act. Scoping letters for this EIS/OEIS were sent to appropriate State Historic Preservation Offices and federally-recognized Native American tribes." The Navy will continue to comply with the National Historic Preservation Act.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	1992 amendments.	
Marckx (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Sincerely, Risty Marckx	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Marie (Electronic)	Please reconsider the supposed 'necessity' of any kind of training or testing that will harm our marine life. It is unfair to assume that the security of our country can be aided by means that disregard the other life that we share this planet with. The future consequences of destroying so many lives in our own environment cannot be accurately predicted. The cost outweighs any hoped-for benefits. It is a totally unnecessary lie that we humans, or we Americans have to choose between 'homeland security' and the lives of creatures that reside in the oceans that surround us. Again, I am begging that the Navy please reconsider this action.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Marigold (Electronic)	Please do not use Hawaii as a testing ground for explosives... We are in a very sacred land.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Marshall (Electronic)	Don't kill millions of creatures in the sea with sonar. That would be cruel and outrageous. Act responsibly.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
T. Martin-01 (Electronic)	I have heard that there are sonar experiments about to be conducted that will kill and injure whales and dolphins and other sea life. I ask you to please discontinue these harmful exercises. Our world's oceans and sea life are fragile and precious. Please have a heart and stop this today. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
V. Martin (Electronic)	Our oceans are under threat already, please dont let this happen	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Marvin (Electronic)	PLEASE don't do this. Our ocean is full of things that we don't even understand. The living beings in the ocean need as much protection as the living beings on land. I understand that the navy, government, and who ever has power, money, and voice to make these things stop and go doesn't really care about the citizens opinion, however please consider the beauty in the ocean, the importance it plays in all our lives, and please put those of us who cant come on land and speak their voice, some kinds of respect and rights! I appreciate the Navy and I thank all those who give us freedom, but the same freedom we savor, is the same freedom the ocean needs. We don't belong there. PLEASE hear the voice. Do what's right.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Matejcek-01	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Matejcek-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4)

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Matejcek-03	I support a robust Navy to protect US national security. But I believe it is imperative that this be achieved without sacrificing marine life essential to a healthy marine ecosystem on which all terrestrial life depends. According to its own Environmental Impact Statements, the US Navy estimates that the planned training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii would involve the use of live explosives and high-intensity sonar. The casualties would	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	be up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage, an additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. Marine mammals navigate, communicate and hunt by sound, which makes them extremely negatively affected by the high-intensity sonar and explosive detonations that currently are part of naval training exercises. Whales, dolphins, and porpoises have essential roles in maintaining marine biodiversity yet already face threats from global warming, ocean acidification, entanglement in fishing nets, loss of food to unregulated fishing, illegal killing. Losing thousands of them as the result of naval training exercises is unacceptable In the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar, including incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species dying in North Carolina in 2005. I urge you to implement the full range of steps to reduce the harmful impacts of these exercises to marine mammals that are recommended by the HSUS and other environmental and animal welfare groups . These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any prediction of marine mammal takes is made by a model and is only an estimate.
Mattera (Electronic)	The USA Navy is proposing to conduct training exercises that would involve the use of live explosives and high-intensity sonar and would kill up to 2,000 marine mammals Please protect marine mammals from explosives and sonar We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the U.S.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Navy to re-think its plans and to incorporate additional protective measures.	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any prediction of marine mammal takes is made by a model and is only an estimate.
Mauthe (Electronic)	The war is over! We do not need this horrible playing "Army" in our oceans. Do you realize how many animals you are killing? How rewarding is it to you when you see and smell a dead Whale, Seal, etc on the beach after one of these test? Stop the killing and go play your Army Games somewhere else, we all own a part of Big Blue and I don't like what you are doing to the life of the Ocean.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Maxey (Electronic)	Americans understand the necessity of conducting training exercises for our armed forces. However, we also understand that if the leaders of our armed forces use their intelligence and ingenuity, it is possible to protect innocent and vulnerable marine life from harm during such exercises. The oceans are the habitat for untold numbers of marine life. Just because we have the power to inflict harm on them, we have no moral right to do so. It is incumbent on the armed forces to demonstrate that they can fulfill their responsibilities without harming those forms of life who are the legitimate owners of the oceans.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
May (Electronic)	Dear U.S. Navy, Please re-think your plans and incorporate the additional protective measures below to reduce the harmful impacts to marine mammals. - Avoid the most harmful activities in areas used as calving grounds or migratory corriders. - Avoid seasonal high-use feeding areas. - Create a larger "safety zone" around the exercises - Use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We need a strong Navy to protect our country and we need to protect and ensure a healthy ocean environment for whales, dolphins, and porpoises to live in as it is their given birth right. Respect and protection of marine environments makes us a great nation. We need to ensure that we do not harm many whales, dolphins and other marine creatures. The tradgedies of the past can be avoided significantly. Please remove the facade of having to choose between a strong Navy and national security or a healthy marine environment for ocean mammals by implementing the protective measures above. Sincerely and Respectfully,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Mayer (Electronic)	I oppose the expansion of Navy sonar testing in the Pacific area around Hawaii and California due to the negative impact on whales and other marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mayorga-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mayorga-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Mc Keating-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mc Keating-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The

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Commenter	Comment	Navy Response
		authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
McCartney	I watched the Navy video on this page and I am happy to note the huge efforts being made toward responsible behavior such as recycling, using alternative energy, improving	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	the logger-head shrike population, etc. Accomplishing Navy goals while respecting the lives of other Earth creatures is incredibly complicated I'm sure. Since we see ourselves as the beings with the most intelligence and with the most valid agendas we have an even larger responsibility of stewardship for our fellow creatures while pursuing our goals. Although the Navy says it's doing the best it can to respect the marine creatures I don't believe the proposed testing methods do respect those creatures. I understand the testing is expected to deafen thousands of cetaceans in the course of standard operations. Others will die outright. While it seems bad enough that we would ruin their sense of hearing we need to remember that hearing is their way of living, finding food, communicating with their family/pod. Our desire to test weaponry and defensive methods should NOT turn us (and our children) into the terrorists of these creatures. The lifeforms on our planet are intertwined and all are hugely important. We humans are not intrinsically more important or better than any of the others and we shouldn't subject them to our damage. They have no way to take a stand in this; they are just busy trying to live. I say we let them do that to the very best of our ingenious ability. Please, do not approve testing/training procedures that impose such a price tag on these peaceful creatures.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded few to no mortalities from sonar or explosives. Any prediction of marine mammal takes is made by a model and is only an estimate.
McDaniel (Electronic)	I do not feel safe in a country that chooses to annihilate innocent marine life. With thousands of marine animals that will lose their life in explosions with high intensity sonar, please reconsider. I worry for the thousands more that are not killed instantly, but become deaf and die slow, terrifying deaths as ear tissue is destroyed and sonar communication becomes impossible... effectively intelligent marine life like dolphins and whales die alone and afraid. I believe national security is important, but I also believe in the 21st century with the great amount of intelligence and creativity the finest in the US Navy offer, we can find a better way. Please include protective measures. I know the US Navy is designed to protect US citizens such as myself, but I do not feel protected if the wildlife I love is destroyed. These actions hurt the reputation of the military and country I respect and admire. It becomes more difficult to defend that the US Navy is a force for good, when that force is used to harm. Please mitigate the harm these training actions will take and take protective measures supported by the Humane Society of the US as well as many environmental groups. Thank you so very much for your time and consideration!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mcgovern (Electronic)	i am sorry i missed your public meeting and comment opportunity in may. i just recently became aware of the navy's plan to kill and deafen thousands of crustaceans and other marine life. i wonder how often these programs are evaluated for the impact on the environment and defenseless animals that are at the mercy of our gov't programs that are deemed necessary and fair but only further destroy and cause the decay of our planet. i hope there were other in the communities who care about the marine life of our planet who voiced similar concerns. thank you for the opportunity to express my concern. joan mcgovern	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
McGraw (Electronic)	The Navy's own estimates of sonar and bombs testing causing harm and mortality to so many marine mammals is evidence that the Navy needs to make significant changes to minimize this harm and deaths. I support the recent lawsuits against the Navy that call for scaling back your programs. I urge you to take all steps requested by marine biologists to minimize harm.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
McIndoo-01 (Electronic)	Hello Navy. As a military brat I understand the need for a secure world and I believe in the men and women who work to uphold it. But I have been watching the "progress" of your sonar technology since the early days of LFAS and, really, thank God for our environmental protection procedures and laws. You are messing with this technology simply for technology's sake. Unfortunately too many individuals in the military system are in deep denial about Sept. 11th. All the best technology in the world is not going to cover up the fact that this simple and brilliant plan was used so devastatingly against us by using our own everyday things. Box cutters. Planes. They didn't come at us in submarines and LFAS didn't protect us then. "They" won't now either. Because the game of war has changed. An underwater Maginot Line doesn't answer for our inability to think like the enemy! These military mistakes have happened over and over in human history. What makes you think you are any different? Your myopic belief in your newest strategy--this technology-- will finally make us invulnerable? It won't. Because you aren't thinking like them! A trained killer with a box cutter, if he goes swimming, will go around your sonar wall of death and get us from behind. And they will succeed. Again. Learn from history and stop repeating it. What you are doing is an abomination. It is an abomination to create, test and implement this weapon-- because that is exactly what your sonar acts like-- against another species in their home environment. An environment that we know very little about, and which they are dependant upon for their very survival. They cannot live on land. We cannot live in the ocean. It's not like they have somewhere else to go! And your motives are not heroic. They are very dark indeed. Otherwise why do this in an	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	environment in which we cannot see what you are doing and likewise see the actual true consequences?! It's not just the dolphins and whales, it's the very bottom of the ocean global food chain too! No doubt your weapon can blast apart the simple life forms upon which ALL OF US depend. You are engaging in an unprovoked act of aggression against innocents. There is no way you can rationalize this. HUMAN warfare against HUMAN INNOCENTS is unfortunately part of our human condition. But not the cetaceans and the millions of lives in the sea. And they have no means to defend themselves against us. What you are doing is fundamentally and profoundly wrong. Personally, I have been reeling through the shocks of the economic problems that are part of the history since LFAS, just as Sept 11th is part of that history. I find it so hard to believe that so many good and decent people are having such trouble paying their basic bills, and yet YOU have no issues with spending money on this weapon, this ultimately useless underwater Maginot line, the consultants salaries to convince us otherwise, the maps and diagrams, the list goes on and on. I have to budget a trip to the copy shop. One of your maps and diagrams would stretch that budget, so it wouldnt get done instead. And yet there you are, well fed and housed, on your military career tracks, self assured in your faith in your system. Good for you. Again, I've been there. But because I am reeling along with so many other good people does not mean that I am weak, or powerless, or that I cannot hold you to account. What you are doing is sick. Dangerous. Perverse. And you know it! This is not noble or heroic. It is not upholding any shining military virtues. It will not protect us. When the killer with the box cutter chooses to swim around you, it will prove once again that you failed to protect us. You failed in your duty. And in addition, you will have done so while desecrating whole communities of cetaceans and sea life. And you will be rewarded by adding their pain and suffering to the ghosts and demons that already haunt you. -*- Don't do this. Sincerely, Hilary McIndoo	
McIndoo-02	I just sent you my document but I couldn't get the cut and paste to work. Also my iPad does not have a printer port. So I want you to acknowledge that my comment was recieved and to please email me the entire copy of my comment. This is required of a document that is public record, such as being submitted to this EIS. Hilary	Your comment was received.
McIntyre (Electronic)	Please reconsider the explosive and sonar exercises. The military forces of the United States should be know to protect their people, but also protect their environment and animals within this environment. How can the people responsible sleep at night, knowing what they destroyed. This earth and many of the animal species have been here way before us and we should not take the liberty to destroy them!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
McKenna (Electronic)	To whom it may concern: It has come to my attention that the Navy plans to conduct training exercises along the California coast that could negatively affect marine wildlife. I am asking the Navy to instead consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thank you for your consideration. Joan McKenna California resident	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. McNeil (Written)	Opposed. The Kingdom of Hawai'I remains sovereign although under prolonged belligerent illegal occupation by the U.S.A. and its military. Because no treaty of annexation could be ratified and because of the "executive agreement" between Queen Lili'uokalani and President Cleveland, which is still in effect to this day. Free Hawai'i!	Thank you for participating in the NEPA process.
T. McNeil (Written)	Opposed.	Thank you for participating in the NEPA process.
McNulty (Electronic)	I can barely express how horrified I felt when I saw the amount of devastation to be wrought by your projected training exercises. This is an abomination and must not take place. Damaging our planet and Her seas for any reason makes no sense. It seems more fitting that you should be protecting Her, in all aspects. The planet is our home, the only one we've got! Respectfully, Marnie McNulty	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
McNutt (Oral-Kauai)	I'm more organized than NOAA, which stands for No Organization At All. Sorry. My name is Lyn and my last name is McNutt, which has to be the best haole last name on the island, especially considering my daughter is the Kauai nut roaster. I just wanted to remind you guys, and this one thing that always comes back to me, you're working on tax dollars. Okay. These are my tax dollars. And this process needs much more community input. I read the Federal Register, and that's how I found out about this meeting. I was at the last meeting. I received nothing back about my comments, not a thing, not any acknowledgement. I didn't get on any mailing list. I know I gave you all the information. I handed in seven pages of comments. I have a really strong background in writing EISs and marine policy. They were cogent comments, they were worth looking at and paying attention to. I felt really put out because I wasn't. And I also do the community calendar at Kauai Community Radio. We didn't get anything. Not a thing. People here don't all read the newspaper, and they certainly don't read the Federal Register. And by the way, at the end of this if anybody would like to be on my mailing list for the Federal Register, give me your email because I pull out all the things related to the ocean and land in Kauai and I send them out. As I look at your document right here, who do we call? Where is it written anywhere in here the timeline? Who do we contact? How do we get ahold of you guys? Because I know it's in the EIS, but it's buried in the EIS. And I'd like to come back to that comment the person made about data. I think it was Ken.	Your scoping comments were received, and along with all of the other scoping comments, were reviewed by the Navy to ensure the appropriate project issues were properly scoped in the Draft EIS/OEIS. The Navy appreciates your comments on this project and appreciates your desire to stay informed. In this particular case, the mailing address provided was an old address, which is where meeting information and project updates were sent. This address has now been updated.
McRory (Electronic)	The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. Thank you, Kathy McRory	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Megan (Electronic)	Navy, NO, this is absolutely not acceptable. Sacrificing lives for tests is not an intelligent or sensitive decision. My entire American family does not support the decision to "sound" test! Absolutely not!! Sincerely, Megan , Gabriel & Frances	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Megles (Electronic)	As a senior citizen I have been aware of other times also when our scientists tested sonar and explosives where the whales, fish, etc. of our oceans were threatened and even harmed. Truly I am ashamed of how little respect we have for these creatures. Will we ever learn to respect them and find other ways to conduct these tests? Are they even all that necessary? Of course, people have always found ways to justify their cruelty to animals. 60 Minutes years ago profiled Dr. Michael Carey who shot 600 cats in the head for a wound study. Imagine this was approved. Either I am terribly abtuse or many people are.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Meima-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Meima-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Meister	As a US tax paying citizen, I find it totally unacceptable that the Navy would even consider doing any kind of testing that would do harm to whales and dolphins, not to mention other marine life. We are stewards of this planet, not destroyers. These animals are not only highly intelligent and beautiful creatures, they are also part of the web that we all belong to. I urge you to reconsider your position on this issue. I would venture to guess that if this were taken up for a vote, most every person in this country would vote in favor of the marine life. Thank you , Ann Meister	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Meltzer (Electronic)	I love the Navy but the potential catastophic effects of the proposed testing is unacceptable and inconsistent with the values we share. There must be another way to serve the Navy's needs while protecting our precious marine mammals. thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Merritt (Electronic)	I feel that the Navy is being very irresponsible for testing around 2 of the most beautiful states in the entire U.S. I have homes along the coast of California and on Kauai. The dolphins, whales, and other marine life are already affected by pollution. Now you are going to confuse them more with sonar. I think it speaks so poorly for those in planning and think some other sites should be considered. How about off of Mexico. I sometimes wonder how smart organizations headed by even smarter people can make such stupid choices. This to me is more important than who runs for president or Congress. Before retirement I worked for a government contractor and God help us if you have solicited contractors to perform your dirty work. I'm not sure I'm a proud American when decisions like this are made.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Mezzanatto (Electronic)	I find it reprehensible that as a country we would even consider doing this. Knowing how it affects the oceans beautiful mammals. We are SO much better than this! Have we not become less of a barbaric nation? Are we not supposed to be the example for others? Does anything go now, in the climate of lies and dishonesty, no integrity and whats in it for me..... the Navy has no intention of protecting the mammals in the ocean. They are intelligent beautiful creatures. Would you do this to your family and children? I sure hope not. Then act as if you have a heart and do what is right. Stop implementing something that you KNOW to be harmful. Please.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Micklo (Electronic)	Please refrain from sonar practices all together or at the very least make every attempt possible to protect and preserve all marine life at every level. We should strive to be a leader in the world in preserving and enriching life. We teach by example and thus we must take care of all of life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Minton-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Minton-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
L. Miranda (Electronic)	Dear U.S. Navy, Please re-think your plans and incorporate the additional protective measures below to reduce the harmful impacts to marine mammals. - Avoid the most harmful activities in areas used as calving grounds or migratory corriders. - Avoid seasonal high-use feeding areas. - Create a larger "safety zone" around the exercises - Use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We need a strong Navy to protect our country and we need to protect and ensure a healthy ocean environment for whales, dolphins, and porpoises to live in as it is their given birth right. Respect and protection of marine environments makes us a great nation. We need to ensure that we do not harm many whales, dolphins and other marine creatures. The tradgedies of the past can be avoided significantly. Please remove the facade of having to choose between a strong Navy and national security or a healthy marine environment for ocean mammals by implementing the protective measures above. Sincerely and Respectfully,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
S. Miranda (Electronic)	Dear U.S. Navy, Please re-think your plans and incorporate the additional protective measures below to reduce the harmful impacts to marine mammals. - Avoid the most harmful activities in areas used as calving grounds or migratory corriders. - Avoid seasonal high-use feeding areas. - Create a larger "safety zone" around the exercises - Use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We need a strong Navy to protect our country and we need to protect and ensure a healthy ocean environment for whales, dolphins, and porpoises to live in as it is their given birth right. Respect and protection of marine environments makes us a great nation. We need to ensure that we do not harm many whales, dolphins and other marine creatures. The tradgedies of the past can be avoided significantly. Please remove the facade of having to choose between a strong Navy and national security or a healthy marine environment for ocean mammals by implementing the protective measures above. Sincerely and Respectfully,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Misseldine (Electronic)	I am deeply concerned that you are proposing to conduct training exercises that will involve the use of live explosives and high - intensity sonar. Your own estimates show that you will kill u to 2,000 marine and thousands more will suffer permanent damange such as deafness. Please do everything you can to reduce the harmful impacts to marine animals such as avoiding activities in calving grounds or along migratory corridors; avoiding high-use feeding areas and monitoring to determine if marine mammals are nearby. If you take these actions, your training can still go forward, but you'll minimize damage to these beautiful creatures. Thank you for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Carol Misseldine	impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate.
D. Mitchell (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Deborah Mitchell	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
M. Mitchell (Electronic)	I strongly urge not proceeding with this testing as planned. I understand that it is not disuputed that this is harmful to marine animals, including very intelligent animals such as whales and dolphins, and perhaps gravely so. Of course this is measured against the importance of this testing to national security to a degree that perhaps the public cannot fully know. I do not contest that we value human life over animal life, but of course that relative value cannot be an absolute argument allowing any harm to animals that might potentially be of any small benefit to our species. And in particular, with certain species, we see an almost universal desire to value their well being almost as much as we value our own. There have been many suggestions for modifications in the way the testing is done that would mitigate the suffering of these animals, and I cannot see not doing such things as we might, albeit at some expense. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Moak (Electronic)	I am alarmed and appalled that the US Navy is planning to conduct underwater testing involving explosives and high intensity sonar in areas where dolphins and whales will be injured and killed. Surely there are other ways to conduct this sort of testing that will not endanger these beautiful animals. This type of testing in indefensible and wrong. We do not own this world; the United States needs to occupy the "high ground" in regard to its treatment of animals. There are many things that we need to do to accomplish this. Abandoning this current testing plan is one step that will move this process forward. Thank you for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Mohan (Electronic)	"These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises." This is not worth it. Please find other ways to practice or don't practice	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
D. Monasevitch (Written)	This is a letter opposing the Navy's use of deadly sonar in its war games practices. I challenge the validity of the current DEIS. The military and the government have lost most of its legitimacy in conducting science. Those of us that have been following this have been aware that environmental science has suffered since the 1980 Regan administration and especially since the "W" Bush era policy of firing scientists that do not agree with their politics. Unfortunately the Obama administration had done little or nothing to remedy this situation. The bulk of the science presented in the EIS/OEIS is clearly the work of Ph.D.'s for hire. A Big slew of military hacks, regurgitating each other's papers and dancing around targeted science that substantiates the realities of the wanton murder and destruction of species and the environment. I support the need for a strong Defense. I pay my taxes. I question the bogus science condoning the militarization of the oceans and the planet at the expense of biodiversity. I view the present DEIS an example of pure greed and an utter lack of creativity and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	wisdom.	fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States. Active sonar is currently the most effective way to locate submerged enemy submarines before they are close enough to sink U.S. ships. To successfully defend against submarines and other underwater threats, such as mines, Sailors must train realistically with the latest technology, including both passive and active sonar
D. Monasevitch (Written)	I would like 5 Whale wheels. They will be shared in the schools on Kauai as I make my rounds as a substitute teacher. Free advertisement for the U.S. Navy!	The whale wheels were available for distribution at the public meetings.
N. Monasevitch (Oral-Kauai)	Aloha. Thank you for the opportunity to be here. I appreciate your presence. My name is Nina Monasevitch. I'll give you my card. I'm the co-founder and chair of Kohola Leo, Kohola meaning whales, and Leo meaning voice. We started the group to be a voice for the whales. There's been a lot of discussion here about impacts to marine mammals, and I just want to say unequivocally sonar kills marine mammals. It tortures, it causes excruciable pain to all cetaceans and other marine life. I've done a lot of research. I've read all the scientific papers. The fact that the Navy is even continuing to consider decimating marine animals, particularly cetaceans with sonar is unconscionable. Especially within the Hawaiian Islands Humpback Whale National sanctuary where we're the only meeting and birthing grounds in the United States for these endangered whales. I have briefed some of the EIS. But, of course, it's very long. I haven't read it all. And I've given documentation throughout the years on several scientific papers that I'd like you to include, but I haven't checked whether or not you've included all of those. But the evidence is clear, scientifically sonar kills whales and other marine life.	The Navy shares your desire to preserve marine life. The Navy believes that the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years in this Study Area and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations.
N. Monasevitch (Written)	There are many serious problems and omissions to this DEIS. Here are a few of the problems: In my testimony dated September 12, 2010 I asked for the following to be included in the DEIS: In relation Sonar impact on cetaceans I pointed out that the likely cause of mass strandings arc panic, bubble formation and/or decompression sickness (based on real scientific published papers):	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic These three points were either not included or not addressed in a scientifically relevant matter.	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Monin (Electronic)	I am writing in protest of navy testing in southern California waters in defense of whales.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Monroe (Electronic)	I am big fan of whales, but I am not against your testing. I believe that you will be aware of possible damage and work to minimize it as much as possible. Some things are more important that protecting wildlife and I hope that your training and testing will be beneficial.	Thank you for participating in the NEPA process.
Montalbano (Electronic)	I do NOT support the use of US tax dollars to fund sonar testing of the type contemplated by the US Navy in the proposed program. There is no question that sonar tests of this nature cause damage to whale and dolphin species of every type, including endangered species. Some of these species have only just come back from the brink of extinction. Our Navy is one of the largest and most advanced in the world. While I understand that continuing to advance our naval technology is one of the ways in which we achieved and can maintain that status, I do not suport doing so at the expense of the lives of these creatures. We must approach these issues from the perspective that the worst case scenario will occur, because it often does, and in light of the Navy's own increased estimates of sonar contacts, this number is simply too high. Use the resources we have to develop even better technologies that will maintain our position in the world as a military leader, without harming these creatures. If we can send a man to the moon, I have no doubt you can accomplish this as well.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Moore (Electronic)	save the whales, don't kill them in the name of training exercises!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Moorehead (Electronic)	Please consider the mission of the Navy, to protect us. You are not protecting our overall health and safety if you are simultaneously damaging our oceans. They are not empty space; they are active living ecosystems that need certain conditions to survive. The oceans are already under attack from overfishing, pollution, and ocean acidification. Wouldn't it be great to see our USA Navy become the true defenders of our oceans and put their efforts towards guarding against illegal poaching and complete destruction of all the worlds fish stocks. I'd love to send my tax dollars in for that. Be real heroes. Protect us from the real threat to Americans and everyone else. First do no harm. Protect our oceans, USA. You can do it!! Go USA!!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Moreland (Electronic)	While I believe that we need a strong Navy for protect national security reasons, I also strongly believe that we need to be respectful and protect marine mammals and the oceans. I do not think we have to choose between these two options; we can have both. Because we can have both, I am writing today to ask the Navy to use training methods that do not kill or damage marine mammals such as whales, dolphins and other marine creatures. I understand that from your own Environmental Impact statements you estimate the current planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. Damaging or killing these creatures is unacceptable and beneath us as a great country. A great country does not squander life of any kind when there are other ways to achieve what we need. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	dolphins, and many other marine creatures. I urge the Navy to protect marine mammals from explosives and sonar along the coasts of California and Hawaii. I urge the Navy to take steps to reduce the harmful impacts to marine mammals. Such steps to protect these magnificent creatures include: a) avoiding the most harmful activities in areas used as calving grounds or migratory corridors; b) avoiding seasonal high-use feeding areas; c) creating a larger "safety zone" around the exercises; and d) use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Implementing these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please do not go forward with activities that will maim or kill marine creatures without these mitigating steps to protect them. Thank you, Sandra Moreland	Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate.
Mork (Electronic)	Please discontinue plans for the use of explosives that will, according to the Navy's own research, cause hearing loss in more than 1,600 marine mammals and potentially kill 200 more. The benefits of this project cannot possibly outweigh the negative effects of this program.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
E. Morris (Electronic)	Please do not move forward with the sound testing under consideration. There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
J. Morris-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
J. Morris-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
K. Morris-01 (Electronic)	The Navy's DEIS is fatally flawed and fails to comply with the basic requirements of NEPA. The Navy's assessment of impacts is consistently undermined by its failure to meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA.	The Navy complies with all applicable environmental laws, including NEPA, and has used the best available science in the development of this EIS/OEIS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
K. Morris-02	The Navy fails to properly analyze impacts on marine mammals. For example Sonar impacts on cetaceans that are the likely cause of mass strandings are panic, bubble formation and/or decompression sickness. The following must be included in the DEIS: 1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic The following scientific papers need to be included in the EIS: J. R. POTTER;, 'A Possible Mechanism for Acoustic Triggering of Decompression Sickness Symptoms in Deep-Diving Marine Mammals' Paper presented at the IEEE International Symposium on Underwater Technology 2004, Taipei Taiwan, April 2004. PARSONS, E. C. M.; SARAH J. DOLMAN; ANDREW J. WRIGHT; NAOMI A. ROSE and W. C. G. BURNS. MARINE POLLUTION BULLETIN 56(7):1248-1257. 2008. Navy sonar and cetaceans: Just how much does the gun need to smoke before we act? TYACK, PETER L. JOURNAL OF MAMMALOGY 89(32):549-558. 2008. Implications for marine mammals of large-scale changes in the marine acoustic environment. WRIGHT, A. J.; N. AGUILAR SOTO; A. BALDWIN; M. BATESON; C. BEALE; C. CLARK; T. DEAK; E. EDWARDS; A. FERNANDEZ; A. GODINHO; L. HATCH; A. KAKUSCHKE; D. LUSSEAU; D. MARTINEAU; L. ROMERO; L. WEILGART; B. WINTLE; G. NOTARBARTOLO DI SCIARA and V. MARTIN. INTERNATIONAL JOURNAL OF COMPARATIVE PSYCHOLOGY 20(2-3):274- 316. 2007. Do marine mammals experience stress related to anthropogenic noise? FAERBER, M .M., R. W. BAIRD. 2010. Does a lack of observed beaked whale strandings in military exercise areas mean no impacts have occurred? A comparison of stranding and detection probabilities in the Canary and main Hawaiian Islands. Marine Mammal Science DOI: 10.1111/j.1748-7692.2010.00370.x The DEIS fails to address the following: other impacts on marine mammals such as stress, indirect effects, cumulative impacts, effects of toxic chemicals, hazardous materials and waste oil spills. The Navy must adequately evaluate impacts and propose mitigation for each category of harm for all species marine life. Each individual potentially federal activity that is to have a significant environmental impact should have its own environmental analysis. For example, RIMPAC and DARPA each need separate EIS's. The Navy failed to analyze the impacts on fish and fisheries.	Discussion of the general topics ("panic, bubble formation and/or decompression sickness") noted in the comment were thoroughly discussed in the Draft EIS/OEIS. In particular see Section 3.0.5.7.1.3 (Physiological Responses) for the presentation of the conceptual framework for analysis and Section 3.4.3.1.2.1 (Direct Injury). For a specific discussion of strandings, see Section 3.4.3.1.2.7 (Stranding) and note that a more detailed presentation was offered in a companion Cetacean Stranding Technical Report ("Marine Mammal Strandings Associated with U.S. Navy Sonar Activities") that is referenced in the DEIS/OEIS and available on the HSTT EIS/OEIS website (HSTTEIS.com). The three points raised ["1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic"], are covered within the material as described above. With regard to the references noted, while these particular five references were not cited, all were reviewed during preparation of the Draft EIS/OEIS except Potter (2004), which discusses a hypothesis covered in the Draft EIS/OEIS using the following more recent science and data from seven references: Dennison et al. (2011); Fahlman et al. (2006); Hooker et al. (2009); Moore et al. (2009); Southall et al (2007); Tyack et al. (2006); Zimmer and Tyack (2007). Finally, the EIS/OEIS has been created with National Marine Fisheries Service acting as a cooperating agency with input to both the Draft and Final versions. The team also includes a number of non-governmental scientists and subject matter experts.
L. Morris (Electronic)	Please STOP! If man continues to destroy the natural environment and it's creatures, our lives will not be safe or secure, no matter how many underwater warning systems are in place!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Morrison (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Please consider alternate means which will help protect these amazing animals. Thanks you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Moses (Electronic)	I strenuously object to this testing on the grounds that it is harmful for our marine mammal species. We Americans who live on the Pacific Rim -- California and Hawaii -- value our marine environments and we also support the Navy as well. But we are asking the Navy to take protective measures and find a way to train that does not harm and kill our marine wildlife. We have enough robust science by now to show that these training exercises are devastating for whales and dolphins. Please take steps to find training that eliminates the harm to our marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Mueller (Electronic)	Please reconsider and do not conduct training exercises where there are so many sea animals to injure. There are ways to avoid harm by avoiding migratory routes, calving areas, using safety zones, and monitoring sea life activity in the area. We do not want to hear that whales, porpoises, or other animals are dying.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Mulholland (Electronic)	Please do everything in your power to ensure that whales and dolphins are not harmed in you testing of sonar! These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors;and avoid seasonal high-use feeding areas; and to create a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I implore you to take these precautions into consideration!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Munoz (Electronic)	Hello. I'm writing to you today because I recently read that the Navy estimates up to 2,000 marine mammals, including a large number of animals from endangered species, could be killed due to exercises performed by the navy using live explosives and sonar. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need to protect our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. I'm asking that you please protect marine mammals from explosives and sonar along the East Coast» and California/Hawaii! Thank you so much for your time. Samantha Munoz	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Munzon-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Munzon-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Muzik (Written)	As an expert in Hawaiian Octocorallia, I ask that before your Training and Testing Activities, research be conducted by marine biologists on the effects of your proposed sonar and munitions testing, especially in the Papahanaumokuakea Marine National Monument, and also in the proposed zone from California to Hawaii. Certainly, these sessile invertebrates cannot move away from the proposed Navy Activities, yet, although they have been living there for hundreds or even. thousands of years, it is also quite likely they will not survive the impacts your testing will impose. I predict that their nervous and reproductive systems will be impaired, not to mention their feeding and growth, by your tests. Therefore, please cease your activities until you can prove they are not harmful to these important corals. There are over 100 new species, yet to be named, in deep waters of Oahu, and perhaps many more, over 200, in the Monument! (I know, I dived in the submarine Star II, off Makapuu, in the seventies, and observed them, even naming a new species! I was a Research Fellow at the Smithsonian Institution, and so received permission to dive, observe and collect them. My collection of Hawaiian Octocorallia is catalogued at the Natural History Museum, Smithsonian, Washington, DC.) These important animals form "Octocoral Forests" in the very deep sea, where not only the endangered monk seals graze for fish, but also these "octocorals" provide habit for myriads of other marine life, including both vertebrates (fish) and invertebrates (snails, bivalves, hydroids, sponges, worms, etc.), all creatures which are extremely important to maintain the balance of life there. I ask you to curtail your activities until you can prove you will not harm life in the sea. Without a living sea, we humans cannot	Refer to Section 3.8.3 (Environmental Consequences) where potential impacts to invertebrates are fully analyzed.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	survive either. Katherine Muzik, PhD	
Nakamura (Electronic)	1) please, please, please publicize this site as an alternative to http://signon.org/sign/navy-under-water-sound?source=s.em.mt&r_by=2886317 2) A hard commitment to accelerated development of more capable (highly realistic and flexible) sonar training simulators that can be used in fleet training activities would be a good compromise - this could be a cooperative effort between academia, industry, and the military across RIMPAC nations. By hard commitment, I mean for example reducing the amount of live sonar time by 50% by the next exercise or next EIS period 3) Since there appears to be research showing that mammals will leave the area and return, a training/testing schedule that included a warning/chase activity using lower amplitude signals followed by the actual exercise focused to minimize duration, followed by a minimum waiting period before the next sequence, might be a relatively simple way to minimize the effects at reasonable overall cost. 4) item 3) could be combined with item 2) so an extended exercise like RIMPAC could be conducted with a combination of simulated and live exercises with the additional benefit of using live data to calibrate/validate the simulations.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the EIS/OEIS, today's simulation technology does not permit effective training and testing. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Naples (Written)	I am writing as the US Navy is moving full speed ahead with plans for sonar and explosives training that threaten to deafen, injure -- and even kill -- countless whales, dolphins and other marine mammals. Starting in 2014, I have be made aware that the Navy will harass, injure, or kill marine mammals more than 33 million times in both the Atlantic and Pacific Oceans during five years of testing and training with sonar and explosives. Those alarming numbers come from the Navy itself! These potential injuries include more than five million instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and more	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	than 1,800 deaths. This letter is written to tell the US Navy that inflicting such far-reaching harm on marine mammals is simply unacceptable. The sheer scope of the Navy's proposed training and testing activities is staggering, potentially assaulting entire populations of marine wildlife off the East Coast, Southern California, Hawaii and the Gulf states. I understand that Navy ships will flood millions of square miles of ocean with high-intensity sonar, which is known to cause disorientation, hearing loss, stranding and death in whales. In addition, the Navy will be detonating high-powered explosives with the potential to fatally injure the lungs and other organs of marine mammals. The waters around Hawaii and Southern California -- including critical habitat for endangered blue and humpback whales -- would be among the hardest hit. The Navy predicts that more than 1,000 marine mammals would be killed in this area alone. The most significant threat to marine animals from the Navy sonar testing is potential injury or death to the North Atlantic right whale. Please be aware that fewer than 400 of these survivors now hover on the brink of extinction. I am urging the US Navy to reexamine and reevaluate their potential ocean sonar and explosive testing as this potential harm and destruction of our endangered marine wildlife will threaten their ability to survive and must be reevaluated. These actions are inhumane and unacceptable.	practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Nekomoto (Oral-Kauai)	Hi, my name is Dave Nekomoto, and thank you for having me today and allowing me to speak. I'm speaking for PMRF. I represent myself, although I have been an over 20-year employee of the Niihau Ranch. I've been in touch with the Niihau Ranch people very closely all through those years, and I still am. You're name is Louis, right? And Vida. You were both here when the Niihau people gave testimony that they supported the early EISs that had to do with missile defense. When a lot of people were claiming, No, you can't, you know, screw the Hawaiians that way. Well, they came out and they said, Hey, listen, we can make our own decision, and they decided to support the PMRF. And I can say unequivocally that they still support you and the Robinsons, Keith and Bruce, who I work for, they both support you also and so do I. Wars today are won by technology. And one of the big reasons for improving our technology is to reduce the amount of casualties on our side. And I can say that they've been very successful at doing that. There's nobody here that's speaking for hundreds of thousands of people that Saddam killed or the hundreds of thousands of people that got killed in Korea for just objecting to the government. That's the kind of thing that causes the U.S. to get involved in these wars. Nobody wants to go to war. I spent my time in Vietnam, 426 combat missions in Vietnam on an attack helicopter and on ships. My ears ring today constantly because of the loud noises that I was subjected to. But that's something I just live with. The dues I have to pay. So I do support you. I do respect all of your opinions. And we do have those	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	opinions because the guys were out there to fight for this nation. Thank you very much.	
Nekomoto (Written)	Thank you for receiving my oral statement at the Public Meeting held last evening in Lihue. In three minutes of testimony a person can basically relay his/her support for the project or opposition to it, and not much more than a general reason for taking that position. For this reason, I am also submitting this written statement to be able to discuss in more detail important aspects of public sentiment and to share my experience in these important matters. I have participated in every major EIS which PMRF has been involved in over the course of the past twenty five years, and what I saw last evening was similar to public information meetings of the past. You have a pattern which includes those who support the whales, dolphins and turtles and don't want to do anything to hurt them; the ones who are against war no matter what; the native Hawaiians who are fighting for the rights to "their" land, and the few who support a strong national defense posture. There is a great silent majority of Kauaians that will support PMRF. They are those who see PMRF as a good neighbor, and friend in the community. They are also the ones who value the economic impact of PMRF's operations on our fragile island economy. There is a large population of those who are related to PMRF employees, who depend on paychecks from the base; the local merchants that live off of the spending of that income; the visitor industry businesses, hotels, rental cars, airlines, restaurants and gift shops, all who witness significant spikes in their business when PMRF hosts large operations. All these folks and more will show up for public hearings when the chips are down, and more so if they feel a threat to their livelihood. They all know PMRF's worth to the community.	Thank you for participating in the NEPA process.
Nelson (Electronic)	PLEASE take steps to reduce the harmful impacts of testing to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises, and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. PLEASE re-think training exercise and testing plans and incorporate additional protective measures. THANK YOU. Jill Nelson - Kansas City, KS	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Nesladek (Electronic)	Please stop any testing and let the ocean be free from this kind of cruelty to the enviorment.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Ness (Electronic)	Please do not move forward with your plans for training and testing in the waters around California and Hawaii. These marine mammals have enough threats and issues due to human choices and behaviors. They are entitled to live just as we are. They're safety and well-being is equally important to ours. Sincerely, Rebecca R. Ness	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Nevans (Electronic)	Please do not conduct military tests which harm marine wildlife.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities.
Newhouse (Electronic)	Ladies and Gentlemen, We live in a busy world which is why jobs are created. These jobs are designed to allow citizens of the world time to do the job they are focusing on for the betterment of famly and global community with the comfort that the jobs they are paying for via taxes are representative and an extension of their own personal intergrity to life. With this system design we wish to be confident in our employees ie Navy, etc, as they expeditite protection for sustainable life not dominance over life. I support protection of life, thus support military personel. However, I do not condone morally wrong behavior toward what I consider an attack on conscious life through a murderous approach. It is obvious that cateceans have mind, body, emotions and social community. It is obvious that we have not enough knowledge to jeopardize the balance of this water planet by using EIS/OEIS pollution in the water upon a blue-water planet we are currently and bilogically calling home. I can feel the electromagnetic pollutions we have created on land and I caution additional stress we are implementing to the earth and her creatures for the sake of war, destruction, contol and science. We are ignoring and have imprisoned the basic wisdom of the indigenous keepers of the earth thus putting at risk Humanity's basic roots and human's basic desire to be kind. I do believe research and history has noted that we are in danger of extinction, thus I support protection for all life until which time war and death proves a more successful way to create peace and life. We have technology which is supportive; and less aggressive and primitive; by using a more compassionate approach that allows the evolution of Humanity to show dignity and sophistication toward the balance and harmony the Universe mathematically and scientifically has exhibited in the creation of the solar system, planetary interaction, to the tiniest living organism, which we are contantly putting at risk through our desire to manipulate and control that, which in the long run, we will ultimately discover were designed to dominiate life and remove the joy of living. Whomsoever participates in projects such as these will find accountability and shame following their heirs and heritage for years to come. To protect the future generations we must put a stop to historic behavior of destruction, ignorance and unconsiousness. Education does not make a person smart, but wisdom does. Reflect on the logic and wisdom of EIS/OEIS and you, too, will find a lack of evolution in this process, unkindness, irrevocable ramifications and a danger to our future possibly leading to the extinction of humankind. Know the land and you shall know thyself. Treat the earth with respect and you shall reap respect on a level, I believe, has yet to be considered. Respectfully, Gayle Newhouse	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Newland (Oral-Hilo)	I have a pretty simple message, the one that I've brought here every time we've come to meet our partners in domestic harmony, the Navy, which is that there's so much energy all across the world every day about fighting, war, killing, hating, what are we going to do? And please don't make faces at me because I would listen to you with respect. But I've come, you know, again as always in the spirit of domestic harmony and in the spirit	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	of aloha because there are lots of things that we have to give our attention to, like how we're getting along with each other. The people that we've met over the years here through Barking Sands and through Pearl Harbor have only been bright, kind-hearted to us, open-hearted, and willing to hear what we have to say and very thankful that someone showed up who is willing to hear and see what they had to say and meet them simply with an open heart. So we're all here because we love our life. We love our world. We love the sea life. We want to see the best done for it all. But maybe we can take a look at inside of ourselves to see what we can do to help generate a more harmonious world so that the day will come when the Navy is out there promoting harmony for all of us and working with navies of other nations because we know we have changes coming to this world. When I read the material that's up on their website or the newspapers or on the Internet and everything, what I'm seeing is partly what the navies are doing is they're establishing platforms where they are able to work together in harmony and knowing that when they call someone on that boat over there, someone knows how to answer, and all those systems are set up. The Navy's purpose is also a humanitarian purpose. They send their ships. They send their supplies. They send their resources to places where there has been devastation, and they have helped in many, many ways. Many people are thankful for the navies of the world. I'm asking that we could take a different kind of look at the situation and see how we can help change the world dynamic, help them do their work better so that we do have a world in harmony and that they're only there to help us when something really bad happens because rest assured things are going to be changing. We're going to be very thankful that they're able to go and address these issues all across the world whether it's tsunamis generated by meteors, whether there are earthquakes or any other catastrophic changes. I for one am very thankful that the Navy are my friends and my partners in domestic harmony, that they're willing to hear what we have to say. And everything I've ever seen and heard like from Tom Clements and all of them is about how they super-mitigate, how they're really careful, that they care. We have to understand these people care. They're just like us, working in the Navy and for the Navy, but they care, and I know we'll have a better outcome when we just reach back with our caring. Thank you.	
Newland (Written)	We are the 100%... knowing Unity Consciousness. Every journey begins with a first step. Every writer begins with a first word. I've started my chapter for rose, dear rose. Rose asked me to relate how my relationship with Cetacea, whales and dolphins, has influenced my life and the lives around me. My podlet, including my island community on Hawaii Island, the Big Island. When the request for a chapter came out the country was occupied by Occupy groups. The focus was on the 99% or the 1%. You were one of 'us' or one of 'them'. From the beginning that troubled me. After all, unity consciousness is about we are all here together, we have more in common than anything, we are all earth humans, regardless of origin. How could the world come to balance so long as had a polarized people, us vs. them thinking? As I looked around for things to inspire and	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	remind me, I came across this section in an interview about dolphins and birth a few years ago. Star Newland on Dolphin-consciousness. Ashley: So, tell me about this dolphin-consciousness and how it came to be so important in your life. Star Newland: Wow, that's a long story! Ashley: Okay, first tell me when you say dolphin-consciousness, what do you specifically mean, define that more for us. Star Newland: I would say the essence of the dolphin-consciousness is unity consciousness. Knowing that we are all part of everything, that we are connected to all of it, whether we are aware of that connection to consciousness, the reality is, we are still connected anyway. One of the things that happened in my own birth that took me quite a while to work out was what I call the myth of separation, which is what I thought my mom and I underwent. I was on the outside, we were separate and apart. And that was the consensus consciousness too. At that time there were very few people who really understood how long, extensive and deep the inner bonding is between mother and infant. And when I realized that, whether my mom thought we were separate or what, the reality was we were still connected. And when I put that together for myself, I was able to put that together within me, in my life. I was able to be part of it, and when I met the dolphins, physically, directly, for the first time in Florida, they came and showed me that we have much more in common than I had imagined, that we were much more alike than I knew. See 'Telepathy's Gift' on www.planetpuna.com. And it was the beginning of an exploration for me to find out who we are to each other and what is our common bond? What are our common bonds? And even prior to that when I met dolphins at another place in Florida I went and saw them after the show and I had a really strong telepathic experience with them. It took me a while to figure out what had happened. In hindsight I realized they reached into me, into that part where all of life is connected and said basically, we know who you are, we remember and recognize you. And this is a connection. I refer to it like the inside part connecting to the other inside part. The indwelling being, whether it's a dolphin or a human or tree or an ant or a grasshopper it hardly matters, everything that is alive especially has that indwelling component of life and we're all part of that life. Ashely: That does change the way you live doesn't it, when you realize that, or when you open out to that. Star Newland: Completely, so that to me is the dolphin consciousness. And that life was meant to be more playful and more fun and more light-hearted and above all connected to ourselves and to our children. And up to this moment I've had remarkable telepathic rapport with my first son. Even last night I was about to text him something and got sidetracked on the text and he calls. And of course he'd call right when I'm in the midst of texting! It always works that way and we have so many examples of that. But when we allow ourselves to be close and remain close to our children, that's a large part of what makes a difference. Even though our life was pretty different than what I had anticipated, by this time I had learned to be centered with everything, and whatever we were experiencing my son took his cues from me, the primary figure in his life and in his world. To the extent that I was able to flow with it and make the most of all these challenges, he was able to do it and get it that way as well.	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	INSPIRATION I was a close friend of Toni and John Lilly. Their life's work though the Human/Dolphin Foundation inspired me before we ever met. Reading Communications between Man and Dolphin' opened my mind to a new kind of life on Earth, a shared planet with our Cetacea kin. We say this as there is a fair amount of evidence showing specific marine mammal characteristics in humans. How do we come to have them? Hmm? How did they come about? What does it mean? Do we have companionship on our journey through life? A loving, intelligent, really fun relationship is possible when we let ourselves connect with dolphins or whales. As soon as I heard the words 'dolphins and birth' at the same time in 1982, from my new friend Josef, my world shifted. Suddenly I could see how that kind of birth would be so exciting! So amazing to birth in water and have dolphins around us. While it seemed so natural to me at the same time it blew my mind. While this kind of birth was then practiced in Russia and being introduced to the West, it had been a traditional birthing practice for many native cultures across the world over millennia. Fortunately, Hawaii is one of those places. Ultimately it was that which brought me to Hawaii. When I first saw newborns swimming I was touched to my core. OMG. That's what we were meant/designed to experience. Instead we were born hard into gravity, our world view limited to what we could see lying on our backs in a crib or in a carriage, occasionally in arms. Our mobility came about only when someone picked us up and moved us. After a while we could move our arms, legs, head and so on. In water though, we could move them all from the beginning of life. This same feeling showed up much later as I witnessed twin calves born in Arkansas. I am amazed to see them walk right away, have mobility from the beginning of life. Birth into water and the subsequent mobility buoyancy affords wires our brains very differently than when we are born onto land and the world of gravity. Our bodies wire differently from birth because all parts of it have mobility and buoyancy at once. Subtle structures of the brain gently protected in the womb have a chance now to mature in this aquatic environment. We have a center of buoyancy instead of a center of gravity. We have 360 degree perspective and have mobility under our own volition. We have the perspective of unity, we are part of the water, yet we feel it cross our skin. Like dolphins we move freely and easily carried by currents as well as our own efforts. Since we dwell upon the land we can retain this center of buoyancy by living joyfully. Why am I interested in these things? I wonder what human kind would be like were we to be able to express the kind of life and mindset that babies born like this would naturally have as a function of their birth and early water contact. I think about what we know of our human brain for example, coming from people who nearly all have lost various parts of their brain's natural capacity simply by virtue of how they were born. Nearly all of us are to some extent 'damaged' from the beginning due to the loss of the subtle structures of the brain that are lost when we birth into gravity. How would they live in a way between two worlds? This is part of our future that I have been exploring for these last 30 years plus and we at the Sirius Institute are creating step by step by step. Tiger was raised so very differently in many ways. His 'education' consisted of life and play first. He experienced life to be grounded	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	in, to know many things based on direct experience and contact. He was allowed to be his own person, free to think for himself, to make choices through his mature decision making processes. He was free to play as much as he wanted for play is for children. Play is essential in their development in many areas, especially socialization and brain/body coordination. He chose his own hours, his food, eating schedule. I was known as the mom who said yes! Instead of the terrible twos, we had the terrific twos. We had so much fun living like this. We bypassed all the fighting about rules and schedules and homework, other peoples' ideas about what was right, or how it should be. We created what we call "the transmission of our culture'. A baby elephant is with its mom, side by side for 14 years, 24/7 to learn the ropes of how to be an elephant. If it takes that long to pass on elephant culture, how much do our children need to be good humans? How can we think that leaving our children on their own in many different ways would prepare them for life? Where and how are we transmitting our culture to them? WHAT DOES IT TAKE TO BE A HUMAN BEING OF A CERTAIN LEVEL OF FUNCTIONING AND SUCCESS? Rather than focus on readin', writin' and 'rithmatic, we focused on life and play first. Part of his cultural transmission consisted of having Mike, our research director as his personal tutor, play buddy and teacher of things biological along with the many pod people we met along the way, all with their books of wisdom, things they know and could pass on. Mike is a Ph.D neurobiologist and rocket scientist and child at heart. We played and stayed up all night as he wanted to, tumbling into bed as the dawn broke and the birds started their songs of the day. I missed that that the sights and sounds of the dark. I was always in bed at bedtime though still wakeful and keen to have more time awake and to play or learn. Perhaps this is why I'm a night owl. When we experience this kind of flow it helps us move through life more readily. Life is a flow – Zero a box of minutes and hours cut off from each other, scheduled to the max. Most parents, when I ask them why their child is in school reply, "so they can be with their friends". Hardly anyone said so that they could get a better education or get into college. It was so their children could play with other children. Then why I wondered did they go through so much school trauma when they just wanted a way for their child to be with other children. It is much easier than we know to educate our children. I keep reading about 'No Child Left Behind' and teaching to tests that are so secretive of their contents that it's a violation if the teacher even looks at the questions. What the heck? Who's behind all this? How does it happen that our lives and our children's lives are co-opted by school decisions that have almost zero to do with 'educating' our precious children. My son matured into a compassionate, competent, intelligent thoughtful productive member of the human race. He is the dolphin conscious child I'd worked so hard for, waited so long to hold in arms. By the time he was born I knew quite a lot about how to do better for him. I was mature enough to stand my ground in the face of much resistance on how to raise this new type of dolphin conscious child. He learned from me to follow his own path, to create his life around his interests and passions. He accompanied me as I went around creating community concerts and events then found	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	his passion for creating shows for his cohorts, giving them a voice for their kind of music. He saw me speak out and work in areas that mean a lot to me and now is a leader in his own right on various issues. He motivates and inspires others, young and old alike. He introduced 'Zero' to an Occupy flyer. That made me laugh. With homes to share he made them available to his cohorts so they had safe place, sanctuary just like we did, when more than a few nights there were 12 to 17 adolescents with us who just wanted to be somewhere they felt warmth and security. And many nights we had them toasting marshmallows on candles in the living room, young people away from home for various reasons sharing the simple comforts of good mammalian contact. This is how closeness creates comfort, our theme for 2012's Domestic Harmony Awareness Action Initiative. One thing about this kind of relationship with our children is to remind us why we had them in the first place… to support them in being who they are and what they came to be. Each child is unique!!! Think about it- if every snowflake is unique and there are gazillions to the nth. Degree, how can we possibly think any two human living beings to be the 'same'? How can we 'educate' them to their potential since how would they have a chance to express themselves fully if they have to conform to a certain way of thinking, seeing, answering questions and so on? And we have them to raise them as best we can, to cherish and love and enjoy, to have fun together, to share our world and more. Due to so many pressures we often shunt them away, let the state and others take them over. I let go a more secure life by living simply and making 'mom' my work. I was a single mom who created a pod around us wherever we were. Remember where two or more are gathered, our have a pod (let). Out of this came the Pod Project. I should have seen it coming as I saw many aspects of how I thought our life was going o be turning out very differently, seemingly with a mind of its own. In my article, 'how to raise a dolphin conscious child', there were already signs of the traveling life we would live. We stayed in places beyond count across the country and in our home towns, brining 'pod people' to our friends, old and new. I saw how this type of experience and exposure to life enhances the development of feelings of connectivity, how living close and being with one another, and meeting other pod people gave us the feeling and experience that there are good people everywhere, and mom and child have changes to see others in diverse environments, stimulating pattern recognition and stimulating neural development through input. The image of the robot in the movie 'short circuit' came to mind often as our life led us to rich, stimulating, fun and challenging situations. We were creating his mind to be full of connections and as he got this my own wiring was being redone. Assuredly, this lifestyle is only appropriate for some. We chose to explore this kind of life through the circumstances we met. We have lots of ways we can raise and interact with our children. I talk story about us as we did things very uniquely. Above all, listen to the child… our inner child and our own child (ren). If a child is going to lead the way, we have to be willing to follow. The Pod Project brings us together in pod homes, islands of stability across the neighborhood across the state and already the world. Pod homes bring us together in places where there are good people, people we feel	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	comfortable with even if they are really different. Good hearts abound we found everywhere, caring, connected, belonging, part of life and having a role to play in the life of the pod. WATCH PEOPLE IN HARMON Y TO SEE WHAT THEY DO… for many hours over the last few years I've been at 2 Step Beach with the Hawaiian uncles, like Herbert and Eddie, Norman, Rocky, Alika, Colburn, Louie, Albert who gather throughout the day and evening to talk story, play music. He Boats come and go too, and so I've been learning about fishing and hearing stories about how people used to live – close to the land for real. Few cars, zero electricity, roads or any stores close by and they had to walk a long ways to get to school. Everything was fresh from nearby. Enough was kept a hand of most things cause there was little if any ice or refrigeration. Foods had to be prepared a certain way and above all, people mostly took just what they needed. My friends knew how to do everything and would again should the boats stop coming. We are in the middle of the ocean farthest from landfall. Most of what is here is shipped. I'm there this night while my new pod daughter CJay plucks songs at the ukulele under the direction of Uncle Norm, and learns an integral part of Hawaiian Culture. She's a natural and they are delighted I brought her by. A big smile crosses my face as I watch my friend fit in so well. Music has a way to do that as the universal language. Melodic strains of Hawaiian songs fill the night air in the company of waves flapping at the shore just feet away. One by one over the years I've let them know that some of the most precious moments of my life have been here with them. I think about things like that… whatever I experience goes into eternity with me, it is part and parcel of my Earth time. Does it really matter if or how we have continuity of consciousness when we 'pop' out? For do we really 'die' so much as 'pop' out when we are done with our Earth time. Perhaps to 'pop' back in somehow, when we find the reentry code. I am mindful of what I'm experiencing, what I subject myself to. This started in earnest when I was carrying my son. I realized that everything I was now experiencing, witnessing, feeling, thinking was going into him. When scary things showed up like snakes or poisonous spiders in Arkansas I breathed deeply and sent calming thoughts out and trust in my wellbeing so we both knew snakes and spiders could be just snakes and spider something else in the world. This led to being more mindful of what I attract to myself, what I think, how are my interactions with 'others'. Harmonious? How am I feeling with what I watch or read, what actions I take, what I'm projecting 'out there'. For sure enough, all of this matters. Over our lifetime, moment by moment we are creating the pictures inside ourselves that we then put 'out there'. This is self-reflection, knowing ourselves and being true. Recently this was shared more with a group of parents and Keikis (children) here for my friend Connie's dolphin retreat. The words tumbled out as inspiration flowed …every action, every thought, feeling matters. The more conscious we are in any moment the more we set that energy into what is happening. When I'm being more mindful of what I eat, where it's from , is it clean and pristine, is it bee friendly, gmo and round up free and so on the more this adds to our collective consciousness that is functioning now from a place of knowing we all matter. These are aspects of life that are important on an island	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	in the middle of the ocean, farthest away from landfall, where easily 40% local corps are bee pollinated. And we import 70% or better of our food. It matters that we start asking these questions and when we make better choices, more 'pono' choices everything will start reflecting our awakening. We have to be aware of many things now, of the interconnectedness of life and the global nature of 'we are here together on this world'. We are humans first. We have that common bond. We are connected. Everyone doing one small mindful thing any moment during the day, for example, adds up to a huge amount of new higher energy into the new matrix, the matrix of our choosing. You being the one person who tips a street musician enough to buy dinner that one time could be the one who helps s/he go on in their music career after being inspired/kept alive even by your kindness. You being the name on a petition to mandate clean water or land or dolphin free tuna, could be the one who tips the scale and yet One of many. Here in rural Hawaii water is especially precious, as it is becoming increasingly so across the globe, and much of it comes directly from rain into catchment tanks. Zero rain, water runs out. Yet by watching how water is used, conserving it even when there is lots, helps through taking good care o f the resources at hand. We can have more and/or we can do our utmost with what we have. This applies in big ways across the islands of Hawaii. Realizing that babies are mostly born well and sound we actively have to do things to create their various ailments. It is easier to keep children well than to get them better once they become ill. It is easier to keep them well by strengthening their immune systems by suckling as long as baby wants when possible, by keeping them in arms a great deal, close to us, for we are mammals who are designed to thrive when we are provided with the mammalian basics. Skin to skin contact helps develop protective immune factors to keep them well when they get a scratch outside. Are children born well and raised to be strong naturally going to succumb to the autism epidemic or any of the myriad of diseases afflicting our keikis? Ask around. How many autistics are there in this population? Nearly zero. By living life that considers what is best for this child now and answering that as they mature we will bring about a sea change for our kind. Much like being good to the land (aina) –keep it clean, build it up, put good food to it, tend with care. By bringing these factors and more into play in pod homes, we are strengthening our 'local field effect' (Book of Blonde Physics). We are creating a living energy field within and around us that spread from pod home/person to pod home/person anywhere in the world. As we move around we bring it with us for it is who we are, now living more in harmony within ourselves and generating it as we go through our lives. This is how one person makes a difference every moment as well as triggers others. Larger gatherings, what we call superpods' happen with us as well. One very special place in my heart is Kalapana, close to where I first landed in Puna, Hawaii, home to Madame Pele, volcano Goddes, birther of new land. Here, at Uncle Robert's Kava club, there are many gatherings throughout the year, week after week. The focus is to unite the guests who come from near and far to experience Aloha. True Aloha.	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Nickerson (Electronic)	Dear Navy People, PLEASE stop the testing of sonar weaponry in the waters of the Pacific, which are already contaminated with radioactivity from the Japanese meltdown. We still have so much to learn from the dolphins and whales, their methods of communication and language. These creatures are incredibly intelligent and an important part of the Hawaiian culture. People come here to swim with them and learn from them, and you want to knowingly attack them with your "testing" and "training" for war. How is it ok to wage war against other intelligent life forms and not be charged with murder? Where are the boundaries for the rules of war on this one? What kind of morality conversation was had in which it was decided that THOUSANDS of animals would be seriously injured and killed EVERY TIME you "test" your equipment. It's not too late. You can stop this. Let's stop killing ourselves, each other, our home planet. I really like the beaches here in Hawaii, let's not cover them with the carcasses of dead animals. Thank you for remembering your humanity.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Niklasson (Electronic)	I appreciate your willingness to hearing the public opinion on this important matter. Seeing the research that has been done on this and the dramatic effect previous test have had on marine life I am frankly chocked that you are even considering going ahead with this. Please do not pursue this project I fear that it will have a very negative impact on marine life! It seems to me that there already is much research to support my stand point.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Normandin (Electronic)	Don't commit murder.	Thank you for participating in the NEPA process.
Novak	To whom it may concern, Please protect marine mammals from explosives and sonar	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	along the coasts of California and Hawaii. I urge you to re-think the proposed plans for the use of sonar and explosives, and to incorporate additional protective measures. Thank you for your consideration, Samantha Novak	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Novello (Electronic)	Please do not continue with this testing program/exercise. There are numerous studies that show this is damaging to marine mammal life. We here in Hawaii and on the west coast depend on these animals and the tourist revenue they bring to us. By hurting them, you are hurting the welfare of thousands of Americans. Furthermore, you damage the global life web. The oceans account for 3/4 of the planet's surface. There is no way that you can cause damage to it without a ripple of effects spreading outward from it.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Nuccio (Electronic)	I opposed the use of sonar training and testing a few years ago at the Whidbey Island site here in Washington State. I am opposed to the use of this technology in the waters near Hawaii and California as well. These are the same whale populations! The Navy certainly has this information about the annual migration of these mammals for feeding and birthing all along the Pacific Coast of the U.S. I am also opposed to the use of sonar in the Gulf of Mexico, for similar reasons. In addition to the whale populations other mammals, such as dolphins, will be affected. Thank you for your time and attention.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Nunez (Electronic)	Please discontinue the exercises planned. They are harmful to our marine wildlife.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
O'Brien (Electronic)	The U.S. Navy is proposing to conduct training exercises that invole explosives and high intensity sonar all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. The planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. Please consider steps to reduce the harmful impacts to marine mammals. Please avoid the most harmful activities in areas used as calving grounds or migratory corridors. Avoid seasonal high-use feeding areas. Create a larger "safety zone" around the exercises. Use aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. These steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Whales, dolphins, and porpoises deserve to live	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and to have a healthy ocean environment. You can make this happen. Please take these steps to reduce the harmful impacts to marine mammals.	activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
O'Bryan (Electronic)	As a California citizen (and an animal lover) I urge you to please rethink your SONAR plans to include protective measures to prevent killing or deafening marine mammals. Thank you in advance for considering incorporating compassion into practice. For the animals, Leigh O'Bryan Sherman Oaks, CA	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
O'Dowd (Electronic)	I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Please protect marine mammals from explosives and sonar.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ognjanovic (Electronic)	The Navy's use of sonar in the fragile Whale and dolphin habitats is an antagonist. It is driving the mammals away from their habitats, disrupting their families, and it is causing changes in all their habits, not least many of them are being driven to distraction and beaching themselves on purpose or accidentally. The sonar must respectfully stop in these fragile habitats, our natural resources are equally vital to our country's legacy and these mammals are sentient beings.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
O'Halloran (Electronic)	Please stop harming dolphins and whales. The Navy's work is important, but please find a way to protect our natural heritage. We should be stewards of the ocean.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
OKeeffe' (Electronic)	Do NOT do this. Do NOT do this. Do NOT do this.	Thank you for participating in the NEPA process.
Olson (Electronic)	I urge the Navy to not test your sonar or conduct war games in Hawaii or California territories because of the harm this will cause marine life. Our marine species are already under stress from all forms of pollution in the ocean. It's time to conduct ourselves in a way that supports a healthy marine environment rather than degradade it. Dominion means to take care of not dominate... so far most humans have done a very good job of dominating and causing harm to other species including ourselves. Now it is time to be caretakers of all our marvelous life forms. Humans need to stop thinking only about themselves. I have been interacting with Cetaceans for 23 years and know they are an intelligent aware social species that deserves to live in peace. They have much more to share with us than their blubber on a dinner table or to be in the way of target practice for sonar guns. I have written a book, Messages From The Dolphins. It includes my insights on five subjects and what I would say to humans if I was a dolphin. Chapter four is about war. Please take the time to read it. Hopefully you will realize that for the sake of all our species not just humans we humans need to begin living peacefully with each other. It is available as an ebook at my website www.dolphinsmile.org Thank you for taking the time to read this comment. In Peace, Scott	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Olson-tuma (Electronic)	Please protect our marine wildlife and do not conduct this testing, US Navy.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities.
O'Neil-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
O'Neil-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Oordenaar	I am very concerned about the effects of sonar on marine life, and especially Cetaceans (dolphins, whales). Here's why: Cetaceans' brain as a matter of fact contain spindle	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	cells, the type of cell in humans responible for giving us complex speech, strong emotions and empathy. In whales and dolphins the concentration of these was even found to be 3x as high as humans. Above that, their brains are a lot bigger. (source: http://www.newscientist.com/article/dn10661-whales-boast-the-brain-cells-that-make-us-human.html) There is more than just anatomic evidence. Dolphins are also self aware; cetaceans are the only species apart from humans that can think about thinking, and possesing self-awareness. (source: http://news.discovery.com/animals/dolphins-smarter-brain-function.html) Luckily, people now try to decipher their languages, hoping to verbally communicate with them. (source: http://news.discovery.com/animals/dolphin-talk-communication-humans-110906.html) Other recent researches state cetaceans have cultures, their own names, accents, dialects, can teach each other, and deserve rights as non-human persons. All reasearch aimed at investigating the effects of sonar on marine mammals show the same conclusions: Significant damage to internal organs Severe hearing damage Known cause of cetacean mass strandings Please reconsider your navy testing policies and plans, now with scientific knowledge in mind. Thank you. J.T. Oordenaar	Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Orr (Electronic)	Hello, I know we need defense, but it must not be at the expense of important marine life. The pain the creatures feel from these tests must be excruciating and a slow painful death. I believe we must evolve past this type of testing, can we not? Thank you, Michele Orr	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Ott (Electronic)	With all the research DARPA does, I sincerely believe that the Navy needs to work on a better solution than using sonar that damages more of our mammal marine life. It has taken 40 years for the humpback whale to make a comeback from near extinction to ONLY reach the designation of "endangered" species. There is research on the damage to dolphins and whales hearing and the disorientation leading to death and serious injury of mammal marine life due to the SONAR used by the Navy - in the U.S. and the U.K. Stranding, beachings, confusion and fear cause whales to stop feeding and subsequently die. The UK military has research from 2007 that clearly indicates there are issues with sonar in causing death to whales and that in 2011 additional research conducted by a team of international scientists has confirmed the earlier research. We have some of the best scientists in the world working on these issues and still, this issue continues to plague us in finding a better solution. The NAVY should re-evaluate it's plans, establish a timeline and a plan for alternatives, expedite research on better tools than SONAR, and start to more fully balance the military need in the context of damage to the ocean environment. It is unconscionable that the U.S. Navy would expand the damage to the marine environment by simplistically justifying it's actions by creating fear in the public. It requires leadership to take a more thorough and thoughtful approach. I respectfully submit, having been a public servant, that there are always alternatives that	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	can be examined, and in this case, should be considered to mitigate the loss of marine mammal life.	available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines.
Overman (Electronic)	Dear Sirs: I have read through much of the EIS and will continue until I finish it, but I don't see any strong effort made to consider alternative testing and training methods that would not entail the assured death or deafness of marine mammals. I hope the choice you are making - the one that DOES assure death or deafness - is unquestionably the ONLY way to properly test and train, and not that it is simply the most expedient. Please consider providing an extension to your comment period as well. The size and technical aspects of the EIS require a great deal of time to read and review, especially for folks with more than one job and with other responsibilities who also have a strong interest in marine ecology. Thank you for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines.
Owen (Electronic)	What is this world coming to? Why do you have to destroy marine life, for someone's thought to "better" our security? It's sick.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

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Commenter	Comment	Navy Response
		activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Oyarzabal (Electronic)	Please do NOT conduct any training and testing that involves the deafening or harming of any marine life.Respect these magnificent ,sentient beings and conduct yourselves in a dignified way as is expected of the US Navy.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Padawer (Electronic)	The devistating impact on marine mammals of sonar testing must be stopped. How many creatures have to be maimed or killed before the navy takes its responsibilty to protect not destroy the oceans seriously?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Pagano (Electronic)	I wish to encourage to US Navy to take further steps to protect marine mammals during sonar testing. Steps including avoiding migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed would all minimize death and injury to these mammals. Americans including myself prize our marine mammals and I cannot stress enough that no measure to protect	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	them is unwarranted. Thank you for your consideration.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Painter (Electronic)	Please doi not test along the west coasts in such a way as to harm marine life. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Paleka (Written)	Opposed.	Thank you for participating in the NEPA process.
Pambianco (Electronic)	There's something REALLY wrong with this: If you haven't done so already, today is the deadline to comment on the U.S. Navy's Environmental Impact Statement for training and testing in the ocean around Hawaii and California during the next five years. You can easily comment at their online site: http://hstteis.com/GetInvolved/OnlineCommentForm.aspx The Navy's report states that the exercises could cause 1,600 marine mammals to suffer from hearing loss or other injury from its use of sonar and explosives each year for the next five years. The report also projects that 200 marine mammals will die each year. Please speak up on behalf of whales and dolphins now. Do we civvies really need to comment about how awful this is? Come on yall..we all have to Live here together. Please stop this madness. FYI:I'm a former Navy brat so THANKS FOR YOUR SERVICE...but PLEASE PLEASE PLEASE don't do this!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Pap (Written)	I could like to see the Navy adhering to the HI state federal Consistency process (through the Coastal Zone Management Act). During the last permit approval process, the state objected to the decibel levels being used during the training exercises due to impacts on marine mammals and other coastal resources. They were overruled by the	In compliance with the Coastal Zone Management Act, the Navy has completed a Consistency Determination with both Hawaii and California. See Section 6.1.1 (Coastal Zone Management Act Compliance) in the Final EIS/OEIS for the complete discussion of

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Secretary due to pressure from the Navy. This go around the Navy should take a hard look at its training exercises and whether they can be changed to meet the requirements of Hawaii's coastal zone management program.	Navy activities and compliance with the Coastal Zone Management Act.
Parr (Electronic)	I understand that the U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to your own Environmental Impact Statements, the estimates show the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I completely understand the need for protecting our country, but there is a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. There is evidence that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please re-think your plans and incorporate additional protective measures. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
L. Parraga (Oral-Kauai)	Okay, my name is Lou Parraga, Jr. I'm 84 years old. I live in Kekaha. And during the Second World War I used to go into the base and pick up the garbage. My father raised a lot of hogs, maybe about 50 or more. So I seen planes coming and going, and some all shot up from the Midway battle. In fact, the worst one I seen was a gossier, I think, had the pilot and the copilot in the back, two cockpits. And I was going there, and I saw this plane coming and sputtering and backfiring and all the smoke coming out from the exhaust. And I took off, I wanted to see where he would land. When he landed, I was right there by the airport, and he landed the plane. And I saw the guy in the back was just hanging over like this, hanging over. He was dead. And the pilot just landed the plane and the plane hit the runway, and he veered off right into the sand. And the fire engine guys came, and when they got to the plane, the pilot himself was dead. So that's a terrible thing to see. I was a young boy at that time. But that's what military is all about and wars. So, okay, I'm a Korean War veteran, 1950, that's when I got the call to go into	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the Army for the Korean War. And of all things I got the notice on my birthday, and my birthday is trick-or-treat. So to be inducted November 5th. Maybe I should turn like this. So I got trick-or-treat from the government to be inducted November 5th. I spent three years in the Army, and I seen things that if you're not in the service you will never see or understand. A lot of people that protest about this, lot of people don't understand that have never been in the service what the service is all about and what the base do and good for us. How would most of you people feel if you have a guard in the front door instead of a criminal? And that's what the base is. They're like a guard for us. I hear a lot of things that somethings that cannot be proved. So I think without the base we'll be in big trouble. Thank you very much.	
M. Parraga (Oral-Kauai)	I was born here on Kauai. I'm 85 years old. I've been very ill for a long time. I was known as the volunteer. I didn't never gave up on my country. They took good care of us. I seen war because we heard the bombs, we heard the airplanes going over to bomb Pearl Harbor. Our country didn't let us alone. Right away they came. All young men, very good soldiers. Why can't you people understand we need our father in heaven? We also need our country who gives us so much. We got to be thankful for that, not go against the country. Some do wrong in your country, right. But most do not. Our Navy do not. They helping us. Don't go against them, please. Please take care of our men. Why do they do that? Now you get good care. I see them with nice cars with money to feed their children. I do not have anything like that, but I love my country so much. I wish I wasn't sick so I could help more. Thank you. Change your minds, be for your country. The country loves you and they love me. Thank you. I love to sing the Star Spangled Banner.	Thank you for participating in the NEPA process.
Parrish (Electronic)	I am against your impending sonar research which may, by your own admission, deafen and kill potentially thousands of dolphins and whales off the coasts of California and Hawaii. I ask that you put an end to this inhumane and unconscionable Naval program and look for alternative, more humane ways of testing your sonar equipment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Patterson (Electronic)	PLEASE PLEASE protect marine life from explosives and sonar in Navy and all exercises. This is unnecessary.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Pendarvis (Electronic)	As a citizen, I am very concerned about Navy activities which might impact marine life, particularly dolphins and whales. HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Thanks, Richard Pendarvis, Ph.D. (Chemistry)	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Pennington	to whom is going to read this, I do NOT see the true reason to do these excersises. To thoughtlessly KILL and Injure ALL those animals for practice... REALLY? i would one	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	day like to have my daughter and her kids know what marine life is... doing such training excersises that will hurt and kill animals on the endanger spieces list will further hinder our oceans and our future generations from enjoying the rich life they support. the whalers around the world atleast kill to eat the poor animals... not just for the heck of it... i understand the Navy HAS TO do somethings but the wildlife in the oceans around the US are still trying to come back from the BP oil spill that was now 2 yrs ago. i doubt we need dead animals washing up on our shores AGAIN! This is NOT ok and i dont support these actions the US millitary are willing to take in order to just have drills... there are so many species in the ocean and if we as people are wreckless we will never even get to see and explore them. we only know 2% of what there is to know about our oceans. this is just wrong and as a millitary i will always support our troops BUT I DONT HAVE TO SUPPORT THE ACTIONS THE US GOVERNMENT MAKES THE TROOPS DO! I hope this reaches someone who can help stop this from happening. my daughter is 4. she started to cry as i read to her what the US NAVY wants to do. EVEN A 4 YR OLD KNOWS ITS WRONG! i am writting this as a plea from my heart and the heart of my daughter, PLEASE DONT DO IT! PLEASE HELP TO PROTECT THESE ANIMALS AND NOT DO THINGS SUCH AS TRAINING EXCERSISES THAT WILL ONLY FURTHER HURT THEM. Thank you.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
G. Perez	I, Gale K. Perez, on this 9 day of July 2012, am in opposition for any Naval or Military training and testing in our Archipelago of Hawai'i, by land or ocean. My hand written comment: I am against all training and testing in our aina (land) and ocean. It is our Kuleaua (responsibility) to protect our ecosystem an dcreatures like the whales and dolphins and turtles who are our family. Stop!!	Thank you for participating in the NEPA process.
Mariana Perez (Electronic)	PLEASE protect marine mammals from explosives and sonar.. Protect our oceans and all living things. I have witnessed in person what the effects of submarine sonar testing has done to marine life and it's a horrible things to see and horrible that it is happening! PLEASE STOP and PROTECT OUR OCEANS AND MARINE LIFE. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Michelle Perez (Electronic)	I would like to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Perkins (Electronic)	To preserve our freedom is to preserve our planet and all the life it contains. This test is meaningless, murderous, and unnecessary. The idea that my military and my government would allow such a disastrous test makes me ashamed to be an American. There is no benefit that could possibly outweigh the cost – not only to the environment, but to the reputation of this country.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Perry (Electronic)	Whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. In the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Re-think plans and incorporate additional protective measures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Peter-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Peter-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
A. Peterson-01 (Electronic)	July 10, 2012 RE: U.S. Navy Hawaii-Southern CA Proposed Range Complex - Public Comment Perchlorate is a rocket fuel component and by-product of rocket and missile testing; it also can accumulate in leafy food crops and fruit irrigated by perchlorate-contaminated water and can find its way into food crops from air pollution sources. Perchlorate accumulates in the thyroid gland and can block iodide transfer into the thyroid, resulting in iodine deficiency. Adequate iodide is crucial for neurological development. A recent study found that all types of powdered baby formula (e.g., milk, soy) are contaminated with perchlorate. If perchlorate also is in tap water used to mix the formula, babies may be doubly dosed with the chemical. Long-term exposure to perchlorate has been shown to induce thyroid cancer in rats and mice. The U.S. Navy and the U.S. Air Force uses perchlorate as a fuel in rocket and missile testing in the proposed NWTT Range Complex. What impact will perchlorate from this type of testing have on human health, air pollution, sailors exposed to these chemicals, marine	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	mammals, and the air quality on shoreline communities? Rocket and missile fuel emissions also contain aluminum oxide and particles of soot. What impact do these emissions have on the ocean environment, marine mammals, and general air pollution over these areas and on shoreline communities? When you combine Jet fuel emissions, rocket and missile emissions, warship emissions, laser test emissions all together how will all of them impact human health, ocean air quality, and shoreline community air quality?	
A. Peterson-02	July 10, 2012 RE: U.S. Navy Hawaii-Southern California Range Public Comments: 1) If any hazardous materials wash ashore during the next 5 years the Navy should be responsible for cleanup and disposal of all materials at Navy expense. How much money has the U.S. Navy allocated for this type of clean up and disposal? 2) If disruptions in fishing, availability of fish, impact local fisherman the Navy should be required to reimburse the fishing fleet in the NWTRC, the Hawaii Range Complex, the Mariana Range Complex, the Southern CA Range Complex for their economic losses. (This would include the ocean tourism industry.) How much money has the U.S. Navy allocated for any economic losses from their 5-Year Warfare testing in these areas and the proposed NWTT and Hawaii-Southern CA Range complex expansions? 3) The Navy should be required to cleanup and restore ocean and shoreline areas where natural resources have been negatively impacted and also where regional wildlife have been affected by all NWTRC, NWTT, Mariana Islands, and the Southern CA warfare exercises. How much money has the U.S. Navy allocated for this purpose? How much additional funding will be needed for the Hawaii-Southern CA Range Expansion? 4) Military operations in the NWTRC 5-Year Warfare Testing Exercises include deployment of sonar which may impact marine mammals, fish, and other marine life. Effective mitigation measures (with 90% success in studies), should be used to locate marine mammal populations before deployment of sonar, toxic chemicals, bomb blasts, missile exercises, and new weapons testing. What mitigation measures are planned for the Hawaii-Southern CA Range Complex? 5) All maritime military training range complexes in the Pacific Ocean, especially the NWTRC, the Southern California Range Complex, and the Hawaii and Mariana Islands Range Complexes should have as a primary goal maintaining healthy oceans, marine, shoreline and beach environments that are economic fishing and tourism drivers. How much money is the U.S. Navy allocating for this purpose? Please advise on how many ranges have had this type of restoration work performed when military activities and toxic chemicals have damaged ocean or shoreline areas in the Pacific Ocean Range Complex Areas? What is the monetary allocation for yearly restoration work in the NWTT and the Hawaii-Southern CA Range Expansion areas?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
A. Peterson-03	July 10, 2012 U.S. Navy NEPA Public Comment – for Hawaii-Southern CA Range Complex New U.S. Navy New Sonar Systems have been deployed and we don't know the marine mammal effects from those experiments.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

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	http://www.navy.mil/search/display.asp?story_id=48201 WASHINGTON (NNS) -- The U.S. Navy took delivery of the next generation of the AN/AQS-20A Minehunting Sonar and the AN/AQS-235 Airborne Mine Neutralization System (AMNS) from Raytheon Company at the company's facility in Tewksbury, Mass. Sept. 2, 2009. September 4, 2009: "...Scientists at the Naval Research Laboratory are developing a new technology for use in underwater acoustics. The new technology uses flashes of laser light to remotely create underwater sound. The new acoustic source has the potential to expand and improve both Naval and commercial underwater acoustic applications, including undersea communications, navigation, and acoustic imaging. Dr. Ted Jones, a physicist in the Plasma Physics Division, is leading a team of researchers from the Plasma Physics, Acoustics, and Marine Geosciences Divisions in developing this acoustic source..." http://www.nrl.navy.mil/pao/pressRelease.php?Y=2009&R=63-09r We can expect that these new techniques will be or have been deployed and could have negative consequences on our marine mammals. There are inadequate or non-existent studies by NOAA (NMFS), service about the impacts of these new technologies and their impacts on fish and marine mammals. Thus, the deployment of these technologies in the NWRTC and other ranges should be prohibited. http://djcoregon.com/news/2010/05/13/wave-energy-device-would-steer-whales-away/ WAVE Energy Acoustic devices are also being deployed in the oceans which may have a similar impact on the health of our whales. According to this May 13, 2010, Oregon News article: "...Gray whales tend to stick close to shore to avoid predation by killer whales, which travel in deeper waters. So, gray whales will be traveling through prime real estate for the wave energy-generating buoys...Mate in December will place an acoustic device on a mooring near Newport. The device emits a low, one-second "whoop" sound three times a minute during a six-hour stretch each day. The hope is that the sound, which is about as noisy as a fisherman's fish radar device, would act as a whale deterrent. A $600,000 grant from the U.S. Department of Energy is funding the study..." May 13, 2010 They will be deployed in Oregon by the end of 2010. The problem is that this could disrupt the feeding and migration of our gray whales and also add to the acoustic problems in our oceans. And this device could be deployed along the California Coastline as well. Combined with the U.S. Navy planned expansion and use of sonar this could be a disaster for our gray whales and other marine mammals. The U.S. Navy should take into consideration in their proposed Hawaii-Southern CA Range Expansion other sources of sonar when used in conjunction with Navy Sonar in the NWTRC, the Gulf of Alaska, and the Mariana Range complexes, along with the proposed NWTT range. Acoustic Impacts on Marine Life Marsha L Green, PhD For references and citations contact info@oceanmammalinst.org "…In the past decade a dismaying sequence of marine mammal strandings has occurred in Greece (1996), the Bahamas (2000), Madeira (2000), Vieques (1998, 2002), the Canary Islands (2002, 2004), the northwest coast of the U.S. (2003) and Hawaii (2004). Each stranding has been correlated with the use of high intensity military sonar. These sonars – both low -	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	frequency (LFAS) and mid - frequency can have a source level of 240 db, which is one trillion times louder than the sounds whales have been shown to avoid. One scientist analyzing underwater acoustic data reported that a single low frequency sonar signal deployed off the coast of California could be heard over the entire North Pacific Ocean. Necropsies performed on whales stranded in the Bahamas (2000) and the Canary Islands (2002) revealed hemorrhaging around the brain and in other organs most likely due to acoustic trauma from the use of high intensity sonar. It appears that the sonar exercise in the Bahamas in 2000 may have decimated the entire population of beaked whales in the area. In December 2004, 169 whales and dolphins died on beaches in Australia and New Zealand after reported military exercises and air gun use in the area. In January, 2005, 37 whales stranded on the U.S. coast of North Carolina after high intensity sonar was used in a naval exercise. In March, 2005 almost 80 dolphins stranded on the U.S. coast in Florida after the acknowledged use of naval sonar. Though still too recent to link definitively to sonar, these last three strandings have triggered official inquiries into the possible role played by sonar in these mortalities. Intense noise generated by commercial air guns used for oil and gas exploration and oceanographic experiments; underwater explosives; and shipping traffic also poses a threat to marine life. Air gun use was correlated with whale strandings in the Gulf of California and Brazil in 2002. The global magnitude of the problem has not even been determined, as many fatally injured animals are likely to sink in the deep ocean and not all injured whales strand. Thus, a growing body of evidence confirms that intense sound produced by human-generated noise in the marine environment can induce a range of adverse effects on marine mammals. These effects include death and serious injury caused by hemorrhages or other tissue trauma, strandings, temporary and permanent hearing loss or impairment, displacement from preferred habitat and disruption of feeding, breeding, nursing, communication, sensing and other behaviors vital to survival. High intensity sonars and air guns impact not only marine mammals but also have been shown to affect fish, giant squid and snow crabs. In a study by the British Defense Research Agency, exposure to sonar signals caused auditory damage, internal injuries, eye hemorrhaging and mortality in commercially caught fish. Air guns caused extensive damage to the inner ears of fish and lowered trawl catch rates 45 to 70% over a 2,000 square mile area of ocean (Norwegian Institute of Marine Research). Catch rates did not recover in the five days surveyed after air gun use stopped. This presents the possibility that increasing production of intense underwater noise can significantly and adversely impact food supply, employment and the economies of maritime countries. Recent studies show that ocean background noise levels have doubled every decade for the past six decades. As a result of the masking effects of human-produced ocean noise pollution, the possible communication range of blue whales has decreased from greater than 1,000 km to only 100 km in the noisy Northern Hemisphere. We don't know how this affects their ability to find food and mates. Thus, there are numerous indications that intense noise from sonars, air guns, shipping and other sources poses serious threats to	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	cetaceans and the already depleted fish stocks in the world's oceans…" Marsha L Green, PhD For references and citations contact info@oceanmammalinst.org The above information should be taken into consideration by the U.S. Navy and NOAA should provide all additional recent studies on all weapons systems in your Final EIS/OEIS for the Hawaii-Southern CA Range Complex.	
A. Peterson-04	July 10, 2012 U.S. Navy Public Comment Hawaii-Southern CA Range Complex Proposed Expansion U.S. GAO 2002 Report: "…Unexploded ordnance are munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material and remain unexploded either by malfunction, design or any other cause…" Munitions constituents consist of such things as propellants, explosives, pyrotechnics, chemical agents, metal parts, and other inert components that can pollute our oceans or cause harm to marine mammals, breeding habitats, migrating fish, whales, and other marine mammals. What precautions is the U.S. Navy taking to make sure that these unexploded ordnance are removed so that they don't pose a hazard to ocean and marine life and are not washed ashore onto beaches? If this type of unexploded ordnance is found in the Pacific Ocean or along any coastal beaches will the Navy pay for its safe removal? How much money has the U.S. Navy budgeted for this type of removal and clean up?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
A. Peterson-05	U.S. NAVY PUBLIC COMMENTS & REQUESTS FOR INFORMATION July 10, 2012 It is almost totally impossible to be able to address a proposed Hawaii-Southern CA EIS/OEIS, without being able to consider a wide variety of classified documentation on the results of studies conducted by the U.S. Navy, NOAA, NMFS, independent studies, and other information on past, current, and proposed future weapons systems testing. The information which has been made public is limited and not readily available for public comment at this time under the proposed Hawaii-Southern CA EIS/OEIS. The U.S. Navy in their scoping Open House Sessions (in violation of NEPA), have refused to give any formal presentations, to take oral public comments (maybe a recorder available but hidden at most meetings), or provide information on new studies undertaken by the Navy or NOAA (also university studies). Therefore, we are requesting the following information in order to be able to make informed public comments on the proposed Hawaii-Southern CA Range Expansion. The U.S. Navy has been operating in 12+/- Five Year Warfare Testing Ranges since 2008-2012, including the NWTRC (part of the new NWTT Range). They have refused to provide the public with any information about their new weapons system testing in not only the NWTRC but in other range testing areas or studies on impacts to marine mammals, fish, biologically sensitive areas, migrating fish and whales, strandings, etc. Thus, this is a formal request for additional information about the U.S. Navy activities in the Pacific, Atlantic, and the Gulf of Mexico, where many of these new weapons systems, lasers, sonar, radar and other experimental tests have been or are currently being tested and their impact on all marine life and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	ecosystems. The Following is a List of Documents and studies requested so that the public and our elected officials can make informed public comments about the proposed NWTT: 1) September 10, 2010: U.S. Navy Final NWTRC EIS Volume II Page G113 Answer to public comment question: "…No, the Navy does not plan on suspending sonar operations during the gray whale migration seasons…" What is the justification for the Navy not suspending sonar operations during gray whale, turtle, and salmon migrations or protecting national marine sanctuaries, marine reserves, biologically sensitive areas, and breeding habitats? 2) The U.S. Navy has ongoing 5-Year Warfare Testing Programs in their Southern California and Hawaii Range Complexes. Does the Navy suspend sonar or bombing exercises during gray whale and other marine mammal or fish migrations which use the proposed NWTT and NWTRC corridor at various times of the year for these migrations as they move through breeding, feeding, and other biologically sensitive areas while nurturing their young? Will they suspend these activities in the proposed Hawaii-Southern CA Range? 6) The Navy states in their Final EIS and ROD (Record of Decision) that they will be testing new weapons systems in the NWTRC. What precautions will be taken by the Navy to protect marine mammals from the unknown impacts of these weapons systems? Will the Navy be testing these new systems and weapons in the proposed NWTT and the Hawaii-Southern CA Ranges? 7) What impacts will the new testing of electromagnetic weapons systems have on marine mammals and fish? We are formally requesting an online listing of studies undertaking since 2008, on weapons system testing on marine mammals and fish in the Pacific, Atlantic, and the Gulf of Mexico. In order to evaluate these U.S. Navy, NOAA, NMFS, and other university or independent testing…the Navy needs to provide this information to the public. Once the public can evaluate these study results public comments will be of value in determining future allowable Navy testing in the NWTT and the NWTRC and the proposed Hawaii-Southern CA Range. 8) Since NOAA has issued the Navy a permit and Letter of Authorization to allow the Navy to "take" marine mammals paving the way for full-scale warfare testing, which areas, in the proposed NWTT and the Hawaii-Southern CA Range, will the Navy avoid to protect the endangered salmon and whales populations when they are in migration patterns? 9) U.S. Congressman Thompson has noted that NOAA & U.S. Navy mitigation measures to protect marine mammals are effective only 9% of the time...will the U.S. Navy be using mitigation measures now that are proven effective more than 9% of the time? If so, what studies were conducted by NOAA or the U.S. Navy that were proven effective more than 9% of the time and will the Navy institute using these alternatives? 10) The proposed Hawaii-Southern CA, NWTT and the NWTRC ranges are in an area where the fishing and tourism industries make millions of dollars. Will the U.S. Navy be warning those who are operating such businesses of their activities in advance in order to protect our fishermen and tourists from the impacts of these bombing exercises or toxic chemical exposures (from aluminum coated fiberglass particulates which can stay airborne up to 20 hours or airborne toxics like red phosphorus, smoke, flakes, obscurants or other airborne toxic	Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments." NEPA provides a forum for public involvement in federal decision making. Several opportunities have been provided including scoping meetings, public meetings, and opportunities to comment on the Draft EIS/OEIS. The Navy has engaged the regional fishery management councils. Comments received during the scoping period were considered in the development of the Draft EIS/OEIS. Information on the development of mitigation measures can be found in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the DEIS and FEIS. The mitigation measures listed in the Final EIS/OEIS and Record of Decision are the result of the consultation with NMFS and USFWS.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	chemicals), in the future? 11) The U.S. Navy NWTRC Final Environmental Impact Statement lists many hazardous materials that are being used in the NWTRC and their dangers. The Navy lists the following habitats that may be impacted by hazardous materials: Open Ocean Habitat Surface & Subsurface Areas Bottom Dwelling Communities, Near Shore Habitat which includes bottom dwelling algaes, kelp forests, and seagrass beds. Why doesn't the Navy restrict its testing to limit the impact on biological sensitive habitats in the proposed Hawaii-Southern CA and NWTT Ranges and the NWTRC? 12) In several U.S. Navy final environmental Impact statements the Navy notes that many hazardous materials will be Containerized for Shore Disposal. Where will these contaminants be stored onshore and at what Navy facility will proper disposal be conducted? 13) In the Final NWTRC Environmental Impact Statement there are many hazardous materials which will be discharged overboard. Please designate, on the proposed Hawaii-Southern CA, NWTT and the NWTRC, U.S. Navy Range map which areas in the Pacific are considered "safe" for these discharges? And list any studies conducted by the U.S. Navy, NOAA, university, or the NMFS, to show that these areas are “safe” for these types of “discharges”. 14) In the U.S. Navy NWTRC Final Environmental Impact Statement (Page G417) is found this information: "The Navy is not 'testing' new weapons within the NWTRC. All weapons and platforms coming to the NWTRC as a result of the proposed action have been tested in other training ranges." Why does the Navy need to conduct redundant testing in in both the proposed Hawaii-Southern CA Range and NWTT? (Said testing is currently being conducted in the Atlantic, Pacific (Hawaiian & Southern California & Mariana Range Complexes), and the Gulf of Mexico)? 15) There are fifteen or more U.S. Navy Ranges which have been approved for full-scale warfare testing in the Atlantic, Pacific, and the Gulf of Mexico. These final EIS/OEIS documents show that many weapons systems, bombs, sonar, and other Navy testing is redundant in each of these ranges. This redundancy along with the ever expanding and exponential growth of these ranges costs large sums of money. Many of the practice weapons are costly and older thus their capabilities (like the Hellfire Missile and many bombs, munitions, etc.,) are well known and studied…many having been used for ten to thirty years in various military actions around the world and in the U.S. What justification does the U.S. Navy use when considering practice with live fire practice rather than practice using bombs, etc., which won’t explode but which can be used for practice purposes? It is the contention of many that the U.S. Navy (and all other branches of the U.S. military), should be protecting our oceans and our natural resources not destroying them in the name of war and war practice. Our oceans are a valuable source of food for millions of people, recreation, and sheer beauty. We have enjoyed this bounty and beauty for hundreds of years and now the U.S. Navy and other branches of the military are engaged, without restrictions, in destroying them. What rationale does the U.S. Navy use for destroying our oceans for redundant war practice? Who authorized the U.S. Navy to engage in this type of destruction of our oceans and the marine life therein? And who has authorized the U.S. Navy to conduct atmospheric	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	testing without the proper Environmental Impact Statements like the U.S. Navy CARE Experiments? Our oceans and our atmosphere provide for life here on Earth. If we destroy them in the name of war and experimentation what future will our children and grandchildren have long after we live in a wasteland of war practice destruction? How will Navy personnel explain to their children why the only marine mammals, like whales, that can only be seen are in old Navy warfare promotional movies due to the fact that our military destroyed them and their habitats in the name of perpetual war practice in the Atlantic, Pacific, and the Gulf of Mexico?	
A. Peterson-06	July 10, 2012 Public Comment: U.S. Navy Hawaii-Southern California Range Expansion To: U.S. Secretary of the Navy-Ray Mabus The Honorable President Barack Obama Naval Facilities Engineering Command, Southwest Attention: HSTT EIS/OEIS Project Manager – EV21.CS 1220 Pacific Highway, Building 1, Floor 3 San Diego, CA 92132-5190 I find myself, at the age of 97, having worked to establish many environmental protections for our oceans and our natural resources, wondering what the future will be for my children, grandson, and great grandchildren. In a short time the U.S. Navy and other branches of the military have begun destroying millions of marine mammals, ocean habitats, coral reefs...and so much more in the Pacific, Atlantic, and the Gulf of Mexico. The land and ocean world that our elected officials, the U.S. Department of Commerce, (NOAA & NMFS), and the various branches of our military, have elected to destroy with "shock and Awe" methods using military weapons of all kinds...including new weapons systems and atmospheric testing, is stunning in scope. There are no words to describe the carnage that already has been put into action...and worse yet...the carnage yet to come is almost incomprehensible. "Our military officers took an oath to uphold the U.S. Constitution which does not state that the military has the right to destroy the Earth in the name of war practice." And yet today, the sonarizing, bombing, new weapons and atmospheric testing by the military is destroying the Earth in the name of "conducting war practice" and physics experiments. Our military is conducting illegal satellite and drone surveillance on all of us...killing people with drones...stating that everyone is guilty until proven innocent of the charges, whether inside or outside of the United States, in violation of our U.S. Constitution and laws. It seems that if someone is now killed by a drone they still have to prove, while dead, to the U.S. that they were innocent whether American citizens or not...whether a child or an adult. This violates the principle that we have lived by, under the U.S. Constitution, laws, and our Bill of Rights, which states that everyone is innocent until proven guilty. The military and our elected officials have set themselves up to play "GOD", judge and jury. What happens when their next victim is you? When the police or homeland secruity, the military, shoots you down and later finds that you were innocent but now dead? No amount of guilt money can bring you back or reverse the decision. Now the U.S. Navy and other branches of our military have decided to play "GOD" with the Earth and its bounty of natural resources. Why? It is a good way to financially bankrupt the U.S. with perpetual war and war costs. (One day we	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	will have to hire the U.S. Navy to repair our roads since their war practice is reducing domestic spending.) War practice is a good way to enrich those that produce weapons of war and keep the free enterprise market going through the U.S. selling war weapons to other countries making us less safe in the bargain. I once spoke to a sailor and I asked him if the U.S. decided that my trying to save 11.7 million marine mammals from war practice and weapons testing got me arrested by our U.S. government, for being outspoken, if he would rescue me for exercising my free speech rights under the U.S. Constitution and Bill of Rights? He stood mute... What will this sailor tell his family, his chidren and grandchildren in his later years about his role in this destruction? There is a question for all of us: What will you tell your family and children about why you stood mute and let this happen? The best that I can say is that I stand today against this war practice horror to be perpetuated against our oceans and the Earth. There is no reason or excuse for this destruction to be unleasesd against the Earth. The U.S. Navy can do better...they can protect our natural resources and protect those that have no voice...I stand here today as one voice for our oceans, as one voice who speaks for the whales and other marine life who have no voice, and as the Earth's voice to say "NO" more destruction in the name of war practice for perpetual wars. Sincerely, Ava Peterson	
D. Peterson-01 (Electronic)	Thank you for the opportunity to share my thoughts and concerns for our sea life. " According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises." Why would the Navy want to intentionally cause this kind of damage to Sea Life?? I am asking that planned exercises are stopped immediatly, Without hesitation. The animals that are still living in the sea and haven't been destroyed by industrial fishing deserve protection not Bombs!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
R. Peterson-01 (Electronic)	May 25, 2012 TO: The Honorable Secretary of the U.S. Navy, Ray Mabus RE: Formal Request & Action by the U.S. Navy in the Final HSTT EIS document. Dear Secretary Mabus: I am formally requesting, under the California Public Records Act, a hard copy and CD of the subsequent HSTT Final Environmental Impact Statement of the Hawaiian-Southern California Range Complex once prepared from your current draft HSTT EIS-OEIS document. I would also like notification of the dates when the final HSTT EIS/OEIS public comments are noticed in the U.S. Federal Register so that comments may be made in a timely manner. The following information was release by U.S. Senator McCain and U.S. Senator Levin: http://startingpoint.blogs.cnn.com/2012/05/22/sen-carl-levin-counterfeit-military-parts-pose-significant-safety-risk/ CNN News & Video – May 22, 2012 Sen. Carl Levin: Counterfeit military parts pose 'significant safety risk' "…Because of a recent surge of counterfeit military parts– such as pieces of equipment used in aircrafts– the Senate Armed Services Committee has adopted new legislation to change the procedural laws for buying new or refurbished parts. Senator Carl Levin joins Starting Point this morning to explain the details of the new law, which he has been working on alongside Sen. John McCain. Levin explains that the news laws say that parts can only be bought from contracted, authorized distributors or certified suppliers and dictates that suppliers will be responsible for their own repairs. Regarding the threat posed by the counterfeit parts, Levin explains that the problem occurs almost exclusively with equipment produced in China, and poses a "significant" safety threat to the nation…" End The U.S. Navy is now conducting warfare testing in the Pacific, Atlantic, and the Gulf of Mexico. Nuclear submarines, aircraft, ships, missiles, drones, and a whole host of other warfare weapons are now being tested over land and ocean areas. What actions are you taking to address the issue of counterfeit and questionable refurbished parts being purchased by the U.S. Navy? These counterfeit and faulty parts not only cost the U.S. Navy money but they have the potential to cause injuries to our Naval personnel, civilians, and others when they subsequently fail. Secretary Mabus, I have seen you recently on television and on interview shows, speaking about the U.S. Navy, but never once demanding that action be taken to address the issue of counterfeit parts, especially from China. In addition, I didn't hear you state, for the record, that the Navy will refuse to use said parts, especially from China, in order to protect the sailors under your watch and the civilians that may be killed or injured when these counterfeit parts malfunction. It is time that military parts, software, and hardware be made in the United States where quality controls are in place. I expect that you will at the forefront in stopping the use of counterfeit parts from China and other foreign countries. I am looking forward to hearing from you in writing within the next few days on this critical issue and that you will require that those who prepare your final HSTT EIS/OEIS to address this critical issue in order to protect our troops and the U.S. civilian population. Sincerely, Rosalind Peterson	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
R. Peterson-02	U.S. Navy Hawaii-Southern California Range Complex Expansion Public Comment on July 10, 2012 On May 17, 2012, news reports that "Mass dolphin deaths in Peru caused by acoustic trauma" were announced by "…Dr. Carlos Yaipen Llanos of ORCA in Peru informed Hardy Jones of Blue Voice that acoustical trauma is the cause of the Mass Mortality Event (MME) that killed an estimated one thousand dolphins along the coast of northern Peru in March 2012…" [28]. This is another reason to begin to limit sonar, laser, radar, and electromagnetic weapons testing in the Atlantic, Pacific, and the Gulf of Mexico. We believe that the U.S. Navy & NOAA should investigate and find out if the U.S. Navy was involved in causing this acoustic trama in March 2012, just after the Final EIS for the Gulf of Mexico GOMEX 5-year Warfare Testing & Take was finallized and approved. With the U.S. Navy practicing in almost every square inch of the Pacific, Atlantic, and Gulf of Mexico, the potential for harm to marine mammals increases exponentially. Since your own mitigation measures to protect marine mammals are effective only 9% of the time what new actions will the Navy be taking to improve sonar and bomb blast mitigation measures to 80% effectiveness? Respectfully, Rosalind Peterson CC: U.S. Congressman Mike Thompson U.S. Senator Barbara Boxer U.S. Senator Dianne Feinstein	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Peterson-03	July 10, 2012 Public Comment- U.S. Navy Hawaii-Southern California Range Expansion U.S. Navy / NASA C.A.R.E. (Charged Aerosol Release Experiment), September 19, 2009 Aluminum Oxide Dust Cloud Released Over the East Coast of the United States using a NASA Brandt Rocket: http://www.nasa.gov/centers/wallops/CARE.html 17, U.S. Navy / NASA C.A.R.E. Experiment – "…CARE's principal investigator, Paul Bernhardt of the Naval Research Laboratory in Washington: "The CARE experiment could also pave the way for future launches that would use the uppermost part of Earth's atmosphere as a large physics laboratory for studying charged dust…Dusty plasmas, like those that will be created in the CARE (aluminum oxide dust cloud) experiment…" Will the U.S. Navy be conducting atmospheric testing (Like CARE Experiment Above), over the Pacific Ocean? Will the U.S. Navy be conducting any atmospheric experiments where toxic chemicals will be released that could pollute air, water, oceans, rivers, streams, and coastal regions? Will the U.S. Navy be conducting more CARE experiments over the Pacific or the Atlantic Oceans or land areas where you have range complexes? Rosalind Peterson CC: U.S. Congressman Mike Thompson U.S. Senator Boxer & Feinstein	The Navy shares your concern for the fate and transport of potentially hazardous materials and water quality. All of the reasonably foreseeable effects from the fate and transport of potentially hazardous materials were analyzed in Chapter 3 (Section 3.1, Sediments and Water Quality) of the Draft EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.
R. Peterson-04	July 10, 2012 - Public Comment - Hawaii-Southern California Range Expansion Drone Weapons Testing & Surveillance over the United States & Pacific, Atlantic & Gulf of Mexico The U.S. Navy is now working to expand their drone operations over the United States. In Oregon, a new draft Navy Environmental Impact Statement is due out this	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	summer for public comment. Drones carrying and testing bombs, new weapons systems, testing new types of drones, and surveillance over land and ocean areas are planned for our future. Compounding this issue, as reported by The Guardian.co.uk on April 2, 2012, "…American scientists have drawn up plans for a new generation of nuclear-powered drones capable of flying over remote regions of the world for months on end without refueling…". In addition, there is increasing drone surveillance leading to questions over public privacy in the U.S. Accidents are increasing as the U.S. Navy and police departments in Texas and other areas are increasing drone usage. The U.S. Navy is now purchasing aircraft and other parts from China which have the potantial to be substandard according to Senator Levin and may cause increasing accidents from all types of aircraft. What action is the Navy taking to stop the purchase of defective aircraft and other parts from other countries? How many U.S. Navy land-base drone ranges will be conducting warfare testing, testing new weapons systems in unmanned aerial vehicles or aircraft, using nuclear powered drones, and will be carrying surveillance or weapons over land and ocean areas? Who will be conducting surveillance activities over land areas (private contractor or U.S. Navy or other Branches of the U.S. military in conjunction with the U.S. Navy), on American citizens and what will happen to the information collected? Why are these U.S. Navy drone ranges considered on a separate basis from other ranges when they are working in conjunction with the other ocean based range complexes? Rosalind Peterson CC: U.S. Congressman Thompson U.S. Senators Boxer & Feinstein	
R. Peterson-05	July 10, 2012 U.S. Navy Public Comment: Hawaii-Southern California Range Expansion I just found this BBC News item about underwater listening stations. It appears the U.S. Navy has a way to tract marine mammals with these devices which would be a more effective mitigation measure than is being used by the U.S. Navy & NOAA. I am raising this issue with both the U.S. Navy and NOAA. The new NWTT Range Expansion Public Comment period is over but this might be a way to protect schools of fish and also marine mammals in their testing areas and also in the new Southern California-Hawaii Expansion Range. Sonar Heard Underwater - BBC NEWS January 13 2012 "...Listening stations on the seabed all over the world are streaming sound in real time to websites that anyone can access, allowing people to hear everything from male humpback whales singing off Hawaii, to last year's Japanese earthquake. Conscious of security, the US Navy has brokered a deal with scientists in the north Pacific which allows the navy to delete any sounds of US or Canadian military shipping before the audio is sent out across the internet. It now wants to do similar deals with other scientists around the world, but some experts say that is both improbable, and in this new age of internet accessibility, unreasonable. This is the sound of a sonar system in operation, best known for being used by submarines to determine the position, nature and speed of objects under the water..." Will the U.S. Navy look into this method and advise on how effective this method might be in protecting marine mammals, migrating fish and marine	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	mammals, and other marine life? Rosalind Peterson	[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
R. Peterson-06	July 10, 2012 Public Comment: U.S. Navy Hawaii-Southern California Range Expansion ScienceDaily (Dec. 16, 2010) — The Applied Bioacoustics Laboratory (LAB) of the Universitat Politècnica de Catalunya (UPC) has developed the first system equipped with hydrophones able to record sounds on the seafloor in real time over the Internet. The system detects the presence of cetaceans and makes it possible to analyze how noise caused by human activity can affect the natural habitat of these animals and the natural balance of oceans. A new EU directive on the sea has ruled that all member states must comply with a set of indicators for measuring marine noise pollution before 2012. Will be the U.S. Navy and NOAA be participating in this EU directive to meausre marine noise pollution? Will the U.S. Navy entertain using this method to help protect marine mammals and other marine life from excessive noise pollution, sonar use, laser and radar technologies now being tested or developed in the near future? Electromagnetic weapons systems are being developed which will also impact marine mammals and other aquatic life. Will the Navy be using or testing these devices in the Pacific Ocean areas of the Mariana Island Range, the Hawaiian Range, the Gulf of Mexico Range, the Southern California Range (and new expansion), or in the NWTRC? What impact do all of these new weapons systems have on marine life? What studies have been conducted to understand these impacts by the Navy, NOAA or other independent agencies or universities? Rosalind Peterson CC: U.S. Congressman Thompson U.S. Senators Boxer & Feinstein	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
R. Peterson-07	July 10, 2012 Questions for U.S. Navy Hawaii-Southern CA Expansion: 1) U.S. GAO 2002 Report: "…Unexploded ordnance are munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material and remain unexploded either by malfunction, design or any other cause. Munitions constituents consist of such things as propellants, explosives, pyrotechnics, chemical agents, metal parts, and other inert components that can pollute the soil and/or ground water…" A. Please list all of the unexploded ordnances and also what mitigation measures the Navy is using now in the NWTRC and the proposed NWTT range for this type of unexploded ordnance. (Please include the Hawaii-Southern CA Range Complex Expansion in your answer.) B. Also advise on what impacts this type of ordnance will have on marine mammals, fish, aquatic environments, and what action the Navy will take if they wash ashore. How much funding does the Navy have allocated to protect shorelines? 2) September 10, 2010: U.S. Navy Final EIS Volume II Page G113 Answer to public comment question: "…No, the Navy does not plan on suspending sonar operations during the gray whale migration seasons…" A. Why won't the Navy suspend sonar operations during gray whale and fish migration periods in the NWTRC or the proposed NWTT Range Expansion which includes the NWTRC? And will the Navy suspend sonar and bomb blast operations in the Hawaii-Southern CA Range Complex Expansion during marine mammal and fish migration periods? 3) The U.S. Navy has ongoing 5-Year Warfare Testing Programs in their Southern California, Panama, Mariana Island, Hawaii Range, and other range complexes? A. Does the Navy suspend sonar or bombing exercises during gray whale and other marine mammal or fish migrations in any of their 5-Year Warfare Range Complexes in the Pacific, Atlantic and the Gulf of Mexico active ranges? B. The Navy states in their Final EIS and ROD (Record of Decision) that they will be testing new weapons systems in the NWTRC. Will this be true in the proposed NWTT Range and the Hawaii-Southern CA Range Expansion? C. What precautions will be taken by the Navy to protect marine mammals from the unknown impacts of these new weapons systems? D. What impacts will the new testing of electromagnetic weapons systems have on marine mammals and please list which recent studies, if any, have been conducted to determine their impact on marine mammals, fish and other aquatic life? 4) Since NOAA has issued the Navy a permit and Letter of Authorization to allow the Navy to "take" marine mammals paving the way for full-scale warfare testing, which areas in the NWTRC and the Hawaii-Southern CA Ranges prior to any new expansion. Will the Navy avoid protect the endangered salmon and whales populations when they are in migration or feeding patterns? What actions will the Navy take to protect biologically sensitive areas and breeding habitats in this new Hawaii-Southern CA Range expansion? 5) U.S. Congressman Thompson has noted that NOAA & U.S. Navy mitigation measures to protect marine mammals are effective only 9% of the time...will the U.S. Navy be using mitigation measures now that are proven effective more than 9% of the time? If so, what	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	studies were conducted by NOAA or the U.S. Navy that were proven effective more than 9% of the time and could be used today in the proposed NWTT Range? 6) The NWTRC, Hawaii and Southern CA are areas where the fishing and tourism industries make millions of dollars. Will the U.S. Navy be warning those who are operating such businesses of their activities in advance in order to protect our fishermen and tourists from the impacts of these bombing exercises or toxic chemical exposure from aluminum coated fiberglass particulates (Chaff), which can stay airborne up to 20 hours or airborne toxics like red and white phosphorus in the proposed Hawaii-Southern CA Range expansion? 7) The U.S. Navy Final Environmental Impact Statement lists many hazardous materials that will be used in many areas… and the dangers from unexploded ordinances that then sink to the bottom of the ocean. The Navy lists the following habitats that may be impacted by hazardous materials: • Open Ocean Habitat and Surface & Subsurface Areas • Bottom Dwelling Communities - Near Shore Habitat which includes bottom dwelling algaes including kelp forests, and seagrass beds A. Why doesn't the Navy restrict its testing to limit the impact on biological sensitive habitats in the NWTRC and the proposed NWTT and Hawaii-Southern CA Range? 8) In the Final Environmental Impact Statement the Navy notes that many hazardous materials will be "Containerized for Shore Disposal". Where will these contaminants and containers be stored onshore and at what Navy facility? 9) In the Final Environmental Impact Statement there are many hazardous materials which will be discharged overboard. Please designate on the NWTRC and the proposed NWTT and the Hawaii-Southern CA Range map where these ocean areas considered "safe" are located for these discharges in the Pacific, Atlantic or the Gulf of Mexico? 10) In the U.S. Navy Final Environmental Impact Statement (Page G417) is found this information: "The Navy is not 'testing' new weapons within the NWTRC and other Pacific Navy Ranges. All weapons and platforms coming to the NWTRC as a result of the proposed action have been testing in other training ranges." A. Why does the Navy need to conduct redundant testing in the NWTRC and the proposed NWTT and Hawaii Southern CA Range? (Since said testing is currently being conducted in the Atlantic, Pacific (Hawaiian & Southern California Range Complexes), and the Gulf of Mexico.)	
R. Peterson-08	July 10, 2012 U.S. Navy Hawaii-Southern CA Range Expansion Public Comment – Scoping Under NEPA for Draft EIS There are a wide variety of chemicals used by the U.S. Navy in many warfare testing ranges. We are requesting that the following be addressed in the proposed U.S. Navy Draft EIS with respect to human health, ocean impacts, marine mammals and fish, servicemen in area of usage, air, ocean, and water pollution, also risks from airborne pollution to shoreline communities: U.S. Navy Chemicals Usage – Warfare Weapons Range Complexes in the United States. 1) *Titanium tetrachloride is a colorless to pale yellow liquid that has fumes with a strong odor. If it comes in contact with water, it rapidly forms hydrochloric acid, as well as titanium compounds. Titanium tetrachloride is not found naturally in the environment and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	is made from minerals that contain titanium. It is used to make titanium metal and other titanium-containing compounds, such as titanium dioxide, which is used as a white pigment in paints and other products and to produce other chemicals. Military use it as a component of spotting charges. Titanium tetrachloride is very irritating to the eyes, skin, mucous membranes, and the lungs. Breathing in large amounts can cause serious injury to the lungs. Contact with the liquid can burn the eyes and skin. HAZARDS: _ Explosive _ Red phosphorus or Titanium tetrachloride _ Smoke/incendiary 2) MK-20 Rockeye Description Physical Characteristics The MK-20 Rockeye is a free-fall, unguided cluster weapon designed to kill tanks and armored vehicles. The system consists of a clamshell dispenser, a mechanical MK-339 timed fuze, and 247 dual-purpose armor-piercing shaped-charge bomblets. The bomblet weighs 1.32 pounds and has a 0.4-pound shaped charge warhead of high explosives, which produces up to 250,000 psi at the point of impact, allowing penetration of approximately 7.5 inches of armor. Rockeye is most efficiently use against area targets requiring penetration to kill. Fielded in 1968, the Rockeye dispenser is also used in the Gator air delivered mine system. During Desert Storm US Marines used the weapon extensively, dropping 15,828 of the 27,987 total Rockeyes against armor, artillery, and antipersonnel targets. The remainder were dropped by Air Force (5,345) and Navy (6,814) aircraft. Filling: 247 bomblets 3) *Red Phosphorus may be harmful if absorbed through skin, ingested, or inhaled, and may cause irritation of the skin, eyes, upper respiratory tract, gastrointestinal tract, and mucous membranes. Inhalation of red phosphorus dust may cause bronchitis. Ingestion of red phosphorus may also cause stomach pains, vomiting, and diarrhea. Effects may vary from mild irritation to severe destruction of tissue depending on the intensity and duration of exposure. Prolonged and/or repeated skin contact may result in dermatitis. Chronic exposure may cause kidney and liver damage, anemia, stomach pains, vomiting, diarrhea, blood disorders, and cardiovascular effects. Chronic ingestion or inhalation may induce systemic phosphorus poisoning. If red phosphorus is contaminated with white phosphorus, chronic ingestion may cause necrosis of the jaw bone (“phossy-jaw”). HAZARDS: Explosive; Red phosphorus or Titanium tetrachloride; Smoke/incendiary. 4) **Pyrotechnic and screening devices contain combustible chemicals which, when ignited, rapidly generate a flame of intense heat, flash, infrared radiation, smoke or sound display (or combinations of these effects) for a variety of purposes. Compared to other explosive substances, pyrotechnics are more adversely affected by moisture, temperature, and rough handling. Some compositions may become more sensitive, and even ignite, when exposed to moisture or air. Mixtures which contain chlorates and sulfur are susceptible to spontaneous combustion. Most pyrotechnics produce a very hot fire that is difficult to extinguish and most burn without serious explosions. Many chemicals used in pyrotechnics produce toxic effects when ignited. Other pyrotechnics, which contain propelling charges, create an extremely hazardous missile hazard if accidentally ignited. What types of precautions are used to protect U.S. Navy personnel to exposure when these and other toxic chemicals are	activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	being used in the NWTRC, the proposed NWTT, and the Hawaii-Southern California Range Expansion?	
R. Peterson-09	July 10, 2012 Public Comment: U.S. Navy Proposed Hawaii-Southern CA Draft EIS – NEPA The killer whales of the Salish Sea could be negatively impacted by both the Canadians and the U.S. Navy using sonar in their critical habitat. The proposed NWTT Draft EIS should consider that combined and individual Canadian and U.S. Navy Sonar usage will have a negative impact on marine mammals. Intense underwater noise like the "pings" from mid-frequency active sonar poses significant risks to killer whales and other migrating whales. All sources of sonar and acoustic noise should be considered in the proposed Draft NWTT EIS. On February 6, 2012, the Canadian Naval frigate HMCS Ottawa used its sonar system in critical habitat of the endangered Southern Resident Killer Whales during a training exercise east of Victoria, B.C. The calls of the Southern Residents' K and L pods were heard 18 hours later in Haro Strait, and sub-groups of K and L pods were identified 36 hours after the sonar use in Discovery Bay – a location where Southern Residents have never been sighted in 22 years of records. These observations are reminiscent of an incident in May, 2003, when the USS Shoup's sonar training exercise caused similar unusual nearshore surface milling behavior of Southern Residents in Haro Strait. New limits should be put on the use of mid-frequency active (MFA) sonar, particularly in the critical habitat of the Southern Residents. Killer whales are sensitive to the frequencies emitted by MFA sonar (2-10 kHz) and use the same frequency range to communicate with calls and whistles. Because MFA sonar is intense (source levels ~220-235 underwater decibels), it could permanently or temporarily deafen whales that are unexpectedly nearby and thereby impact their ability to forage, navigate, and socialize. (There has been report of dolphins experiencing hearing losses in other areas.) Even temporary threshold shifts could be deleterious because the recovery of the Southern Residents hinges on their use of echolocation to find, identify, and acquire their primary prey, Pacific salmon. Since the NWTRC is being expanded to include Alaska Testing Ranges these issues should be studied and addressed in the Draft NWT EIS. Current procedures for mitigating underwater military noise are inadequate to protect either the resident or transient ecotypes. These procedures depend on the ability to detect whales within 1000 yards (U.S.) or 4000 yards (Canada), which neither passive acoustic listening nor visual surveillance can reliably accomplish. The unprecedented sighting of Southern Residents in Discovery Bay suggests that they may have been present during the pre-dawn sonar exercise on February 6, 2003, while remaining undetected by the Canadian Navy's marine mammal monitoring procedures. The 2003 Shoup incident and scientific literature that MFA sonar can disrupt marine mammal behavior well beyond the current mitigation distances, particularly in the sound propagation conditions of the Salish Sea. The U.S. Navy should investigate all recent scientific literature on sonar and not just rely on very old studies…many of which were not peer-reviewed. The U.S. Navy should restrict MFA sonar and other intense	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	underwater sound sources in all training and testing conducted in the Salish Sea. We are interested in any sonar research on all whales and other marine mammals being included in the U.S. Navy draft NWTT EIS and the Hawaii-Southern CA draft EIS with regard to the ever-increasing amount and types of sounds that marine mammals and other aquatic organisms are being exposed to from military and non-military exercises and testing.	
R. Peterson-10	July 10, 2012 RE: U.S. Navy Hawaii-Southern CA Range Complex Expansion Public Comment Reducing Environmental Cancer Risk Annual Report NCI Presidential Cancer Panel Report April 2010: Reducing Environmental Cancer NCI – Presidential Cancer Panel 2008-2009 Report Released April 2010 See: Chapter 5 Exposure to Contaminants and Other Hazards from Military Sources Summary: "…The military is a major source of toxic occupational and environmental exposures that can increase cancer risk. Information is available about some military activities that have directly or indirectly exposed military and civilian personnel to carcinogens and contaminated soil and water in numerous locations in the United States and abroad..." "...Nearly 900 Superfund sites are abandoned military facilities or facilities that produced materials and products for or otherwise supported military needs. Some of these sites and the areas surrounding them became heavily contaminated due to improper storage and disposal of known or suspected carcinogens including solvents, machining oils, metalworking fluids, and metals. In some cases, these contaminants have spread far beyond their points of origin because they have been transported by wind currents or have leached into drinking water supplies..." The U.S. Navy as a wide range of toxic materials that are used in all of their twelve 5-Year warfare testing ranges. In specific, please detail all of your plans for proper disposal of all toxic wastes, hazardous materials, and other waste in the new NWTT range and the new Hawaii-Southern CA Range Expansion, and also please detail where all of these hazardous wastes are disposed of properly that are used in the current NWTRC, the Hawaii Range, the Mariana Range, and the Southern CA Range. We oppose any ocean dumping of toxic wastes and materials in any of the Pacific Range Complexes. We request that all areas where the U.S. Navy dumps toxic chemicals in the ocean be designated on a map in the Hawaii-Southern CA Final EIS/OEIS. Please advise on all types of weapons testing that exposes U.S. Navy personnel and the public to environmental, health (carcinogens,etc.), or occupational hazards when training in the NWTRC, the proposed NWTT Range Complex or the Hawaii-Southern CA Range Proposed Expansion.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
R. Peterson-11	July 10, 2012 U.S. Navy Public Comment – Proposed Hawaii-Southern California Range Complex – NEPA Process to be addressed the Draft EIS: Exhibit 1) The U.S. Navy and NASA are also engaged in atmospheric test using aluminum oxide released by rockets (C.A.R.E.), which could have consequences if used in the NWTRC with ocean acidity and water pollution: http://www.nrl.navy.mil/pao/pressRelease.php?Y=2009&R=97-09r This test was conducted on September 19, 2009. Does the U.S. Navy plan additional	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	upper atmospheric testing...possibly over the Pacific Ocean or the West Coast of California, Oregon, Washington, Alaska, Idaho or Hawaii? These dust clouds remain airborne and then the aluminum oxide returns to the Earth. The effects of these programs on our oceans and water supplies have not been investigated and may be have been used in the NWTRC testing range or will be used in the proposed NWTT or Hawaii-?Southern CA Range Complex Expansion. Will aluminum oxide dust clouds be released by the U.S. Navy over the NWTT or the Hawaii-Southern CA Range Complex? What studies have been conducted to determine the impact of these programs on marine mammals and ocean environment? Exhibit 2) New Types of Sonar that should be investigated and addressed in the new Hawaii-Southern CA EIS: 16A) http://www.navy.mil/search/display.asp?story_id=48201 Next Generation of Mine-hunting Sonar 2009 U.S. Navy – Impact on Marine mammals and fish in the NWTRC in 2011-2012 and also proposed for NWTT Range Complex? 16B) http://www.nrl.navy.mil/pao/pressRelease.php?Y=2009&R=63-09r 2009 - U.S. Navy Article We also don't know if this type of laser sonar has been used in the NWTRC or will be used in the proposed NWTT or Hawaii-Southern CA range complex and what impacts it will have on marine mammals and fish? Please advise. Exhibit 3) Also note use of U.S. Navy directed energy weapons systems 2009. U.S. Navy Thursday, October 01, 2009. Has the Navy used this technology in the NWTRC and will it be used in the proposed NWTT range? Naval Surface Warfare Center Dahlgren News New Energy Center to Impact Future Weapons for Naval and Joint Forces DAHLGREN, Va. (NNS) -- The Navy demonstrated its commitment to "game-changing" directed energy technological programs at the Naval Directed Energy Center (NDEC) ribbon cutting ceremony held at Naval Surface Warfare Center Dahlgren Division (NSWCDD) Sept.17, 2009. What impact will this technology have on marine mammals and fish? What studies have been conducted by the Navy to determine impacts on marine life in the Pacific if this technology is used in either the NWTRC or the proposed NWTT and Hawaii-Southern CA range complexes? http://www.navy.mil/search/display.asp?story_id=48285 Exhibit 4) U.S. Navy Press Release June 26, 2010 http://www.nrl.navy.mil/pao/pressRelease.php?Y=2010&R=74-10r "…Complete with the ceremonious champagne christening, the USNS Howard O. Lorenzen (T-AGM 25) is the second ship in U.S. Navy history to honor an NRL scientist for contributions made to Naval and civilian scientific research. Operated by the Military Sealift Command the missile range instrumentation ship, equipped with a new dual band phased array radar system and other advanced mission technology, it will replace the USNS Observation Island launched in 1953…" Do we know what impact this new radar system will have on marine mammals and fish or other aquatic life? What studies have been conducted to determine said impacts? Exhibit 5) U.S. Navy Press Release February 12, 2010 http://www.nrl.navy.mil/pao/pressRelease.php?Y=2010&R=6-10r "…The new device, called the Swept Wavelength Optical resonant-Raman Device (SWOrRD), illuminates a sample with a sequence of as many as 100 laser wavelengths and measures the	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	spectrum of light scattered from the sample at each laser wavelength…" This type of laser might have been used in the NWTRC and may be used in the proposed NWTT or Hawaii-Southern CA Range Complex. Will this device negatively impact marine life in either the NWTRC or proposed NWTT and Hawaii-Southern CA Ranges? Also what studies have been conducted (results), regarding its impact on marine mammals and fish? Exhibit 6) U.S. Navy Press Release September 4, 2009 "…Scientists at the Naval Research Laboratory are developing a new technology for use in underwater acoustics. The new technology uses flashes of laser light to remotely create underwater sound. The new acoustic source has the potential to expand and improve both Naval and commercial underwater acoustic applications, including undersea communications, navigation, and acoustic imaging…." This type of laser technology used in the NWTRC may negatively impact marine mammals and other marine life in the proposed NWTT and Hawaii-Southern CA Range Complexes. What studies have been conducted and what were the results of said studies on marine mammals, fish, and other aquatic organisms? Exhibit 7) There are 59 abstract studies regarding Acoustic Bubbles listed on this site some of which were conducted by the U.S. Navy-none of them involve sea life or marine mammal impacts: http://www.stormingmedia.us/search.html?q=acoustic+bubbles+ocean&search.x=13&search.y=7 What studies have been conducted to see if Acoustic Bubbles have impact on marine mammals and what were the results of those studies? Will the U.S. Navy be using this technology in the proposed NWTT and Hawaii-Southern CA Ranges? Has it been used in the NWTRC and what were the results of said tests on marine mammals? Exhibit 8) Oceans Studies are also showing that sound travels farther as the ocean becomes more acidic. http://www.mbari.org/news/news_releases/2008/co2-sound/co2-sound-release.html This could be problematic with ever-increasing sonar usage and the chemicals that Navy uses that would increase ocean acidification. The Navy E.I.S., does not address this issue nor do the NMFS proposed rules. Many studies indicate that our oceans are becoming more acidic. What studies have been conducted to determine the increasing sound distances caused by ocean acidity in the NWTRC and the proposed NWTT and Hawaii-Southern CA Ranges on marine mammals, fish, and other aquatic life? Please advise on study results. Exhibit 9) Oceans are 'too noisy' for whales – September 15, 2008 What recent studies has the Navy conducted in the past two years on the noise impact on marine mammals? Results? http://news.bbc.co.uk/2/hi/science/nature/7616283.stm Exhibit 10) California EPA Information - EPA Perchlorate Health Effects Report March 2008 http://www.swrcb.ca.gov/water_issues/programs/gama/docs/perchlorate_mar08_infosheet.pdf The toxic chemical listing by the Navy in their E.I.S., shows that many chemicals will be used during their NWTRC Warfare Testing Program Expansion. The California EPA lists the health hazards for most of these chemicals. Many of them are toxic to fish or accumulate in the food chain like Mercury. Thus, the toxicity of the chemicals used by the Navy should also be assessed by the Navy before use in proposed NWTT and	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Hawaii-Southern CA Range Complexes. Did the Navy conduct such testing in the NWTRC to determine the impacts of said chemicals used in the NWTRC range? What tests and what were the results of said tests? How many marine mammals were tested for toxic chemicals in the NWTRC, the Southern CA Range, the Mariana Range, and the Hawaii Range that are being used by the Navy at this time for warfare testing and experiments? Results?	
R. Peterson-12	July 10, 2012 U.S. Navy Hawaii-Southern CA Public Comment RE: NOAA Sonar Mitigation Measures – Permit for U.S. Navy to "TAKE" Marine Mammals NOAA Letter Dated January 19, 2010 – Regarding Sonar Mitigation Measures On January 19, 2010, NOAA sent a letter to Ms. Nancy Sutley, Chair, Council on Environmental Quality that states that a comprehensive review of mitigation measures was conducted and completed by the NMFS (NOAA). This NOAA letter also states: "…In the Environmental Assessments, NMFS (National Marine Fisheries Service-NOAA), also identified the relevant uncertainties regarding the impacts of the proposed training on marine mammals. Two are worth highlighting: • One involves lack of knowledge about the mechanism whereby some species of marine mammals…are adversely affected by mid-frequency sonar. • The other concerns the difficulties of limiting the impact of active sonar where the mitigation efforts depend on visual sighting of whales…" • These issues need to be resolved prior to the issuance of any more permits to the Navy for the "taking" of marine mammals in the proposed draft NWTT and proposed Hawaii-Southern CA Range Complex Expansion EIS. It should alleged that NOAA is using biased Navy data from "after action reports" rather than having unbiased and professional marine biologists present during and after these military actions to determine impacts from the use of sonar, bomb blasts, use of toxic chemicals and other warfare exercises that will impact marine mammals and other sea life. It is unacceptable to accept the premise that sonar is the only impact that will be felt by marine mammals and other sea life during Navy warfare exercises. It is also unacceptable that the only mitigation measures planned are for sonar use. The Navy is unlikely to report negatives because they would have to alter their methods if any adverse information showed up...and they don't want to alter their activities in any manner at this time. The determination that sonar caused certain impacts on marine mammals cannot be separated from the impacts caused by other warfare weapon testing such as bomb blasts or use of toxic chemicals. (When the U.S. Navy uses only their own statistics on mitigation measures with regard to marine mammal impacts, without oversight (on-the-sea) independent monitoring of their activities, you have the fox guarding the chicken coop and reporting on the number of chickens left after each military exercise...not a good idea if you want any of the chickens to survive.) The U.S. Navy should be protecting our ocean marine mammals and other sea life. The proposed Hawaii-Southern CA Range Expansion should consider protection these natural resources instead of destroying them. Some day we may need them…once destroyed they can't be replaced. There is definitely a conflict of interest	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	because the Navy and NOAA (NMFS) are cooperating agencies. We need oversight from independent non-cooperating agencies not dependent on Navy funding, who will uphold U.S. laws which protect endangered and threatened species and other environmental laws. We are speaking about the Navy being allowed to "take" more than 11.7 million or more marine mammals over the course of multiple 5-Year warfare testing in the Atlantic, Pacific and the Gulf of Mexico. This does not include protections for any other marine life, habitats, national marine sanctuaries, marine reserves, and other biologically sensitive areas. And there are no protections or mitigation measures for toxic chemical usage, bomb blasts, missile exercises and other classified types of warfare testing. The Navy proposed Hawaii-Southern CA Range Expansion should consider the total number of "takes" from all forms of military testing and chemicals used in all of the active and proposed ocean ranges and from all branches of the military operating in the Pacific. Independent agencies doing surveys involving independent marine and other biologists will produce the best results. Those that have military connections and funding have a built in bias. The Mineral Management Service (MMS), is not qualified to provide this type of work considering they have been working hand-and-glove with business interests for years and will protect the Navy interests over the environment and the safety of marine mammals. This is not a satisfactory solution or an entity that can be trusted at this time. The NOAA letter also states that the NMFS will conduct workshops on the individual and cumulative impacts of sonar and other noise that now are part of our ocean environment. This letter goes on to state: "…There are no baselines with which to measure the cumulative sound impacts…" Also the Navy has now started to replace older sonar methods with new ones which will also be tested during Navy warfare exercises. We have few studies and little if any research on the impact of these new methods on marine mammals or other sea life." The U.S. Navy should provide current research on new weapons systems and sonar usage in their proposed Hawaii-Southern CA Range Expansion in order to protect all ocean sea life? The U.S. Navy and the NMFS (NOAA), are alleged to be conducting workshops on these issues along with mitigation and monitoring measures as cooperating agencies. The NOAA letter states: "…Protecting important marine habitat is generally recognized to be the most effective mitigation measure currently available…" This leads to the question: Why isn't the Navy being required to protect national marine sanctuaries, marine reserves, breeding and feeding grounds, and biologically sensitive areas from direct warfare activities? The U.S. Navy and the NMFS, according to this letter, agreed to "…conduct a pre-workshop in 2010, to allow the public an opportunity to provide input and prepare for the 2011 workshop…" What were the results of this workshop? Will they be published in the Hawaii-Southern CA Range Expansion EIS? The NOAA letter also states: "…the NMFS has required that the Navy convene a workshop to review and modify, as appropriate, the monitoring measures included in the regulations. This workshop is scheduled for 2011…" The NOAA letter goes on to state: "…All of the planned workshops should lead to substantial new information related to improved mitigation strategies for military	

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	activities…" Will the U.S. Navy be taking into consideration the findings from these NOAA workshops to improve their mitigation strategies in your Hawaii-Southern CA Range Expansion EIS? The Navy NWTRC FEIS and the ROD do not spell out this new monitoring and mitigation program which was apparently initiated earlier this year…It should be noted that monitoring only by the Navy leads one to believe that it is not in their self-interest to accurately reporting their findings...and there should be immediate independent oversight in with regard to the ongoing Hawaiian, Mariana, NWTRC, and Southern California warfare range testing. Important issues that the U.S. Navy should address in their proposed Hawaii-Southern CA Range Expansion EIS: 1) The issue seems to be only sonar related with no mitigation measures planned for birds, fish, and other marine life. 2) What about the damage to the ocean and habitats from toxic chemicals, bomb blasts, missile exercises, and other classified warfare testing? None of these issues are discussed by anyone and they should be raised. 3) No protections for breeding habitats, national marine sanctuaries, marine reserves and other sensitive areas are planned by either NOAA or the U.S. Navy in most areas. This needs to be changed and we need built-in protection for these areas and for areas that are prime food sources for all sea life. 4) The U.S. EPA, California EPA, and the U.S. Department of Fish & Game have also been excluded from these workshops and oversight of Navy activities… and they should be included along with various university biologists and others working in the marine biology fields.	
Pickard (Electronic)	[Expletive deleted] the U.S. Navy and their destructive little boy war games. Each separate war game activity needs independent environmental review. Perhaps, maybe some of them are innocuous. I doubt it. Since the U.S. Military is the biggest polluter in the world I don't expect much in the way of concern for the environment or species in it.	Thank you for participating in the NEPA process.
Pinnisi (Electronic)	Cetaceans have been described as "non human persons" by scientists. I find this incredibly distressing and disgusting to be considered by my country.	Thank you for participating in the NEPA process.
Pinto (Electronic)	Hopefully, there is a less costly and more humane way to go forward with this exercise. Thank you for your consideration.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Pohl (Electronic)	I hope the Navy is engaging this EIS process with a sincere desire to learn, and that the results will strongly influence Navy policy. Too often the attitude to this process is that it is simply a required protocol - a procedural hoop through which we must jump. Given the precarious state of global environmental conditions, particularly in the oceans, we can no longer afford to threaten ecosystems. There should be zero tolerance for permanent damage to sea mammals. The potential for secondary harm is too extreme to justify the risk.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Pollman (Electronic)	Our Earth is beautiful fascinating, and human being's existence relies completely on that of our planet. The Earth's delicate ecosystem can only exist because of all integral components contained within it. All parts of the ecosystem are needed to maintain homeostasis, human existence will cease to exist if we do not stop destroying the world we live in. War isn't necessary for coexistence among men, or any other life form. Destroying and permanently maiming such an enormous population, regardless of the species or form is just ignorant, we too will die with our planet. Stop being idiots. Put your weapons away. Stop killing.., us, our children, and our future.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
B. Pollock (Oral-Kauai)	I want to address the piece in the paper about 1,600 instances of hearing loss and other injuries to marine mammals yearly. Speaking as one who is very hard of hearing, one of the first things you're asked when you take a hearing test is, Have you ever been exposed to a loud noise? All of God's creatures use sound for life. I invite you to be silent for five minutes. Don't hear the birds or the waves lapping on the shore. Don't hear it. What more can I say? I don't need to. Like the Indians said, the Indians said the white man, through his insensitivity to the way of nature, has desecrated the face of Mother Earth. The white man's advanced technological capacity has occurred as a result of his lack of regard for the spiritual path and for the way of all living things. The white man's desire for material possessions and power has blinded him to the pain that he caused Mother Earth for the quest for what he calls natural resources. And the path of the Great Spirit has become difficult to see by almost all men, even by many Indians who have chosen instead to follow the path of the white man. Thank you very much.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
K. Pollock (Electronic)	I am asking that you think about life in all terms and that you stop your proposed testing as it affects us all. Thank You!!!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Pometta-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Pometta-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Portman (Electronic)	I urge you, in the proposal to conduct training exercises along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii, to please incorporate additional protective measures to reduce the harmful impacts to marine mammals from the use of live explosives and high-intensity sonar. Please do the right thing. Sincerely, Rebecca Portman	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Pothof-Barlow (Electronic)	Since the early stages of testing Low Frequency Sonar equipment in Hawaii I have been extremely concerned about the effects of the Navy's activities on the health of the dolphin and whale populations. I have personally been involved in disentangling a dolphin from a fishing line in Hawaii and freeing humpback whales from fishing nets in Mexico and in both these encounters it was clear that I was working with sentient beings, highly evolved mammals who were actively cooperating and receptive to communication that allowed us to work on cutting the netting. The Navy's argument in the Environmental Impact Study that for most species the activities may cause harm and possibly death to individual animals but not affect the population as a whole to me is no more a reassurance as it would be to say that the activities of the Navy (in time of peace) may harm or kill individuals of a population of humans but not the population as a whole. It is UNACCEPTABLE to me that in the name of 'defense' we invade the living environment of cetaceans and pollute it with sound that effects their ability to 'hear', navigate, and can cause irreparable damage and death. In the EIS the Navy states they strive to be 'good neighbors', yet invading and polluting the environment of defenseless but highly intelligent and evolved marine mammals does not establish good neighbor manners at all. As a leading nation in the international whaling agreements we will completely loose our credibility if we are questioning other country's right to "take" whales and dolphins (read: Kill) for commercial, or "research" purposes, while we ourselves allow our Navy to harm and kill whales and dolphins. We as humans have a choice to not knowingly permeate the ocean, an environment that we share with other evolved mammals, with sounds that will harm and potentially kill them. I herewith express my sincere concern and objection to deploying the testing as proposed in areas known to be frequently traveled by whales and dolphins or within effective range of whales and dolphins, unless it is a time of war with imminent threat. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Sincerely, Saskia A. Pothof	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Powe (Electronic)	While I am far from completely informed about the issue, I feel compelled to note that I think that it is vital that the Navy take its responsibilities to mitigate environmental effects from this work very seriously.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Prell (Electronic)	Please consider our precious environment and don't harm the ocean's inhabitants.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 of the Draft EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.
Price (Electronic)	The US Navy has updated their estimates on how much and how many whales and dolphins would be impacted by the use of sonar and explosives in the ocean between Hawaii and southern California. This is another unbelievable tragedy that doesn't have to happen: if you or I were stunned into blindness for 10 minutes while walking on a street, it's not so unlikely that we might be killed by a car. Why are we doing this to the dolphins? I don't see the benefit in harming these creatures who have proven to be both intelligent and peaceful. We are the ones responsible for the wise stewardship of this amazing and beautiful planet Earth we call home, since dolphins and opther creatures obviously cannot advocate for themselves. The damage already done and continuing to be done to our planet is making our "home" less habitable. Please consider changing this policy of using sonar and explosives in the Pacific Ocean. Fukishima has already done enough damage.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Pringle (Electronic)	Do not continue to harm whales, dolphins, and other sea animals with your explosives. My tax dollars should not support harming innocent animals because you can get away with it. You should be ashamed of yourselves!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Printz (Electronic)	please dont do this	Thank you for participating in the NEPA process.
Pupo (Electronic)	I am saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. I would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. Cathy Pupo & Family	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically Navy records have had few to no mortalities from sonar or explosives. Any model predicting takes is only an estimate.
Pusch (Electronic)	Do Not use Sonar in the Ocean. It is murderous, and much marine life is protected. This Sonar must stop now.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Puzzuoli (Electronic)	Please do not conduct further tests around Hawaii and her islands as well as California. It so tragic how you're military sonar and the like is affecting area marine life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Quirk, MD (Electronic)	I am writing in reference to sonar. The new Navy report that reveals how millions of whales and dolphins may be harmed by sonar testing is very concerning. Here in Hawaii we are a whale birthing ground, and the whales and dolphins are protected by law. These beautiful creatures not only have an important place in the marine ecosystem, they also bring millions of tourist dollars into Hawaii. So please, for our sake as well as for their's, create a sonar free zone in Hawaii and find a way to test your equipment that will not harm any sea creatures. I also wanted to say thank you for all that you do in protecting America and Hawaii. You guys rock!	he Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Of the millions of annual exposures resulting from the Navy's proposed training and testing activities, nearly all are expected to result in "Level B harassment," defined as harassment that, "disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering to a point where such behavioral patterns are abandoned or significantly altered." Only Level A harassment would have the potential to injure a marine mammal. As described in the Draft

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, marine mammals would potentially be exposed fewer than 1,000 times annually, throughout the entire Study Area, to sound levels that could result in Level A harassment.
Raebeck (Oral-Kauai)	Aloha, I guess I'm last. So I just want to say that personally I'm not against anybody, and I know that all the people who work in the Navy are fine people and that living here on Kauai that you know as well as all of us what we have. So I just would like to suggest that in the position that you're in if you could instead of, you know, going back and going, Oh, well, we went there and we listened to all those people; to just take it to heart what the people have said and maybe see what you can do in your position to support the stuff that we all love about Kauai and to, you know, instead of just taking orders and going along. I've got to do this because this is my job. To see what maybe else can happen that can bring us together. Like Puanani said, and that, you know, start focusing and working on a little bit more solution oriented. And also just I'd really like to see the testing be done maybe in-house somewhere. You know, if we can put people on the moon, if we can build all these aircrafts, we can certainly test in such a way that is not harming things, you know. And the last thing is, so the testing, are we preparing to have a war? And so then we're ready for war, so then what? We have a war here? So maybe, I don't know, I'd like us to work together towards something a lot more wholesome. And also, one last thing; sorry; is that I know that you Navy people are in a huge, great position to really know about the oceans. You know a lot more than a lot of us; me, for example. And I'd like to really, my real vision for the Navy is when we live in a world of peace, which we can do, is that our Navy is the absolute leader in everything ecological for the ocean and use the power that we have in the seas to clean the oceans and to preserve and protect the oceans. Thank you for having me.	Thank you for participating in the NEPA process.
Rainwater (Electronic)	To Whom It May Concern, I'm writing to ask you to not harm our remaining sea mammals with Navy sonar and explosives. Just go to youtube, search for videos involving dolphins, whales and humans...esp when humans have stepped in to save whales that have been caught in fishing nets. There is an amazing communion between species that one wouldn't expect...in the past. They are amazing creatures. Dolphins have saved human beings as well. I'd like to think if I was ever in trouble at sea, assistance by dolphin would be possible. That could only happen if we protect them. Please find alternatives to your damaging sonar and explosives. Thanks, Gregg Rainwater	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ramakrishna (Electronic)	Please stop using sonar and explosives that kill dolphins and whales. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ramirez-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ramirez-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Rance (Electronic)	Please, the cost to marine life, the fragile eco systems and indeed our survival as a species is too great. These mad practices of war against each other and the degradation and destruction of our planet must cease and desist immediately. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Randazzo (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Randolph (Electronic)	Now that we know and understand how intelligent and how sensitive these animals are, we can not in good conscience subject them to explosives or military training exercises that would impact their safety or well being. These animals have helped the Navy in the past. We owe it to them to be considerate of their lives and health. Now we must help them.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Raney (Written)	Aloha, my name is Dave Raney, and I am Team Leader of the Sierra Club's National Marine Action Team. The Sierra Club is soliciting comments from our affected Chapters and will submit written comments on this DEIS, and the Atlantic Fleet Training and Testing DEIS. This evening I will make a few preliminary comments. First, we recognize and appreciate the contributions of our armed services personnel, including the U.S. Navy, in providing for the security of our homeland under increasingly complex conditions. That includes	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the difficult task of seeking to balance the duties of providing such security while also fulfilling their responsibilities as environmental stewards. We value our freedom and security. As Pacific Islanders in particular, we also value our relationships with whales, dolphins, sea turtles, sea birds, and other creatures with which we share the Planet. They are more than just "natural resources" and we ask your help in protecting them from risks your training and testing activities may pose, as they also face increasing stresses in coming years from climate change impacts -- including rises in sea levels, and increases in sea temperatures and ocean acidification. You have invited our help in improving this DEIS. Here are two suggestions: 1. Use coastal and marine spatial planning tools, as promoted by the National Ocean Policy, to address the conflicts this DEIS attempts to address. NOAA and the Navy have a broad array of applicable tools, including a geographic information system data base showing the densities of marine mammal and sea turtle species found in specific areas. Avoiding areas of high population densities through the use of spatial planning, or zones, such as the National Marine Fisheries service proposed monk seal critical habitat, would be much more effective than the heavy reliance the DEIS currently places on the use of lookouts and limited area mitigation zones	impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Ransom (Electronic)	Navy - Do not take. The world only works by giving. You give us nothing by taking what you propose. You take more than you will ever guess which is not your right. And you know it. Back off.	Thank you for participating in the NEPA process.
Rasmussen (Electronic)	Whales and dolphins communicate by sonar and your sonar can kill them. NO MORE SONAR TESTING!!! You kill whales and dolphins.STOP NOW!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Reeve (Electronic)	Thank you for the opportunity to comment. I attended the session in Hilo, Hawai`i and was impressed by the willingness of the presenters to explain the Navy's. Setting up informational posters in a large room with the experts standing by to answer questions was very successful, and I would encourage the Navy to use it in the future. I cannot agree with the Navy's dismissal of the impacts that will inevitably affect the whales and dolphins due to the training exercises. I am grateful for the willingness of Naval commanders and personnel to take on difficult missions to protect our country, but the area is vast, the list of marine mammals is long, and the remoteness of the area means that the full impacts to animals are unlikely ever to be completely known. I would urge the more expansive application of the precautionary approach to increase the margin for error. Sound travels very far and very fast in the ocean, and many marine mammals live very cryptic lives. At the event in Hilo, I was assured that it is possible to know where the animals are during the Navy's exercises, but my experience as a cetacean biologist tells me otherwise. Even allowing for classified state-of-the-art equipment aboard Naval vessels, beaked whales are notoriously difficult to detect as they spend long periods at depth, very little time at the surface, and have low body profiles when they are at the surface. Look-outs aboard ship will simply miss seeing the great majority of beaked whales no matter how dedicated or well-trained the sailors are. 1. In footnote 1, I suggest that "explosive" and "high explosive" not be used interchangeably throughout the document, as they are not exactly the same thing. 2. In Table 3.4-1, regarding the last column denoting ESA/MMPA status for the included species, some changes would make the information clearer: a. As much of the training area is located in the high seas beyond national jurisdiction and the DEIS acknowledges this fact by using the designation OEIS, the status of each species according to the International Union for Conservation of Nature (IUCN) Red List could also be given. Most of the species have the same status under the ESA and the Red List, but this would give more credibility. b. The spaces for species that are "data deficient" according to IUCN are currently filled by a " – " with no indication of what this means. I suggest that this leads to the mistaken impression that the species with this designation are not endangered or threatened, when that is simply not the case. Not enough is known about these species to make a determination of their status, and this could be clarified. As data are scarce on these species, the precautionary approach could be applied to ensure a margin of error. 3. Also regarding Table 3.4-1, the higher uncertainty CV in the stock assessments could be highlighted to indicate the low confidence in the figures. As the CVs range from 0.07 to 1.43, it is obvious that not all stock assessments are of equal value to decision-makers	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	or commenters, and this could be made clearer. 4. All cetaceans found within a group may not be alike in their contributions to the group. New research suggests that animals may take on specialized roles and that impact to these animals may be more detrimental to the group as a whole. While the Navy cannot tell by observation which animals fulfill which roles, this knowledge lends more support for use of the precautionary approach. 5. Overall, I am very impressed to see that the DEIS is excellently footnoted with references and explanations. This increases the credibility of the document in the eyes of the public, scientists, and skeptics, and I appreciate the effort. 6. It is important to make the point that the tests for odontocete temporary and permanent threshold shift were conducted on a very limited number of subjects, for instance one false killer whale. This violates the scientific method at its very basis and is further support for application of the precautionary approach. Two suggestions proceed from these circumstances: a. We must be skeptical of the results of biological studies with only one subject. The findings must be considered anecdotal evidence at best and applied with much precaution if at all. The argument that "this is all we have" may be the worst one possible, as it may prevent acknowledgement of the inadequacy of the research design and give decision-makers the false sense that they are basing decisions on sound science. The models of behavioral changes and other impacts are only as good as the data they are based upon. b. As the Navy is the major funder of marine mammal research, the Navy could shift the focus of research into marine mammal hearing capabilities away from captive cetaceans – which all too often is based on a very small number of animal – to populations in the wild. This would yield credible and usable scientific results for decision-makers.	
Reever (Electronic)	I have always been proud to be a NAVY family - please keepour faith in the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Reghetti (Oral-Hilo)	My name is Denise Reghetti, and I'm here for myself and the world that I live in, and I'm here for the marine life, the mammals, the animals, the air, water, land. All my uncles and my father fought in World War II for my freedom, and I respect, but also I was given the right to be here today. And what I want to say is my being here in Hawaii has shown me something that I have grown to learn throughout my life, but also it is something that the man before me spoke to you about. And I don't think that a lot of people understand what he's saying, and this is something that we all need to come to terms with and realize because when you go in the form of what we are in, as this body, and you understand the Hawaiian culture and a little of what they have tried to explain to you over, I'm sure, a long period of time, the spirit is something that you can't destroy. The spirit is something that is here. And when the government is doing the wrong things to this land and to the people that this land belongs to, the spirits will be there protecting it. You may be in this form, and you may think that you can see and you can destroy with your guns and your ammunition and your weapons, but you can't destroy the spirit, and they're here, and this is what you're up against. So it's not a threat. It's a warning. They're present. Thank you.	Thank you for participating in the NEPA process.
Reghetti (Written)	The United States Government needs to "step-up-to-the-plate" and STOP! I am asking a great deal but 2012, is the time to honor what is right for all, every, and now. What I am saying I say for many, I am certain you have heard it said many times before myself. Honor what is the right thing to do! Mahalo. Marine, mammal, animal, plant, water, all forms of life on the Big Island of Hawaii -- and world, waters, land, air, etc.	Thank you for participating in the NEPA process.
Reid (Electronic)	KILLING OR HARMING INNOCENT ANIMALS - OR ANYTHING FOR THAT MATTER - IS TOTALLY UNCONSCIONABLE AND WILL NOT BE TOLERATED!!!!! ALL ANIMALS NEED OUR PROTECTION. WILD ANIMALS SHOULD BE LEFT ALONE IN THE WILD WHERE THEY BELONG, NOT TOYED WITH BY HUMAN BEINGS. NAIVE HUMANS, WITH SHORT SIGHTED ACTIONS, WHO DO NOT KNOW THAT IT IS WRONG TO KILL ANY CREATURE NEEDLESSLY, MUST BE EDUCATED. SOLUTIONS MUST BE FOUND THAT ALLOW ALL CREATURES TO COEXIST. THE PLANET'S ECOSYSTEMS DEMAND THIS BALANCE.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Reier (Electronic)	Please reconsider your training tactics along Cali and Hawaii. Having worked very closely with the Spinner dolphins in Hawaii and the many other dolphins and whales that pass through those waters, I can't tell you enough how incredible they are. Their intelligence and beauty bring so much joy and awe to all that encounter them. The Spinners only have the Hawaiian island to call home. Should you train in the way you plan off the coast of Hawaii, those Spinners will have no where to escape to and no	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	home to return to, should they survive at all. Please reconsider your training plans and take these incredible creatures into consideration. It has been proven that sonar, explosions and other Navy exercises seriously, and often fatally, harm the marine mammals in the area. Thank you.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Retter (Electronic)	There must be alternatives to this training & testing that is horrific for our magnificent & precious ocean animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
J. Reynolds (Electronic)	My family has been involved in the military for many years, indeed we have ancestors who served on the Virginia Line in the Revolution. I fully understand the need to protect our waters, but that also means to be a proper steward of the bounty that God has afforded the world. While I can see that there is a need for limited testing of naval weaponry, to do so with a sense of impunity is flouting our responsibility of that stewardship and besmirches the record of the U. S. Navy. We can test, but to a limited degree, and in limited locales that have a minimal effect on cetacean life. The oceans are huge. Remember that the concept of shipping in convoys during World War 2 was developed by mathematicians who recognized counterintuitively that if many ships steamed together, there was that much more oceanic vastness that ships were not in,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and were therefore safer from detection and attack. So think, this concept is possible to apply in a way to cetacean pretection. Find areas where whales and dolphins don't tend to congregate, breed, gestate, and give birth. Locate tracts of open sea that avoid their migratory routes. Add to the pride of our Naval Forces by instigating plans to protect our wildlife. Lead the world, not only in naval power, but in naval responsibility by showing how it can be done, and set an example for other countries, and for those who come after us. Set standards for ocean wildlife protection that speak to and enhance the heritage that John Paul Jones began. Stop it now.	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Reynolds (Electronic)	I am against the useless killing of marine mammals (or any other marine life) for the purpose of military testing and urge those that are able to stop this bararism at once.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
C. Rice (Electronic)	Since marine mammals cannot speak for themselves, it is up to those of us who deeply care about their welfare to do so. "The Navy's report states that the exercises could cause 1,600 marine mammals to suffer from hearing loss or other injury from its use of sonar and explosives each year for the next five years. The report also projects that 200 marine mammals will die each year." This, in effect, equates to the needless slaughter of those marine mammals. Either cease testing or find a means of testing that does not compromise the health and lives of these great creatures of the sea.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Rice (Electronic)	No Authority on Earth has the right to tell others to commit crimes against wisdom. Doing anything that that is potentially harmful to the balance and well-being of Sea Life is such an act. We the people of this Earth ask all those with conscience to stand united in saying "No More" to anything that harms the Earth and all those who dwell here. The time is now and the support is there for all of us to realize a way of being on this Earth that honors all life. Only through this way of being, can we sustain our own. We are united in the circle of life. When we harm one, we harm the whole. We are all Sacred. Thank you	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Richards (Electronic)	I am a consulting mechanical engineer involved with the design and installation of HVAC systems in this area. I have become aware of some unique situations involving suspected electronic interference with some of our systems installed along the coastal region of San Diego. Specifically, remote controlled HVAC equipment (Daikin VRV systems) have a "mind of their own" at various times, often cycling on-off without being commanded by the local controller. Upon being cycled off, the unit promptly cycles on again and vice versa. The solution to the problem, in this case, was done by eliminating the remote control and going with a hard wired control. Based on other bizarre local observations with respect to garage door openers, the general consensus is that there are some unique electrical interference issues. It is unclear what the source of this interference is, however, I believe that you should be made aware of it and take steps to ensure that the proposed activities are sensitive to EMF issues for commercial and residential remotely controlled systems such as the ones discussed here. Should you have any questions, please email or call. Respectfully submitted, Mark E. Richards, P.E.	Thank you for participating in the NEPA process
Richardson (Electronic)	The use of your sonar and explosives will harm thousands of marine life, much more that you are estimating in your plans! Hawaii has 32 species of whale and dolphin year round, many of which are very rare and deep diving whales who depend upon their sonar for survival. Your sonar and explosive practice is going to harm and kill off many of the species we work so hard to protect here under the marine mammal protection act. You MUST find another way to practice your naval techniques without killing or harming animals and sea life that we NEED for our survival here on land. Do NOT use your sonar	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	plans!!!!!	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ridabock (Electronic)	Unthinkable. Shame on the people creating this.	Thank you for participating in the NEPA process.
Riedel (Electronic)	PLEASE do NOT do the ocean testing. You state in your video your mission is to provide freedom of the seas. Please understand this needs to apply to animals too - all life - not just to humans. Trying to bring peace through the suffering of others is not the answer. Being kind to all of life is. Please work together towards that objective in order to bring about peace. Warfare escalates killing and damaging more and more people, animals and the earth itself. This is a fact. History proves it. The definition of insanity is doing the same thing over and over again and expecting a different result. Please let us open to new ways to live together in the world. Thank you for considering my comment.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Riess (Electronic)	Please find another way to accomplish the testing and training necessary without a negative impact on the oceans ecosystem. Thank you.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Rillero (Electronic)	I am strongly opposed to the Navy's proposed testing in Hawaii and California due to the possible adverse impacts on whales and dolphins.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Rizzi (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Roach (Electronic)	The Navy's report states that the exercises could cause 1,600 marine mammals to suffer from hearing loss or other injury from its use of sonar and explosives each year for the next five years. The report also projects that 200 marine mammals will die each year. Whales use their hearing to communicate with each other and their survival is dependent on their hearing. Please rethink ways of doing these tests!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate.
L. Roberts (Electronic)	Your testing will irrepairably harm ocean life. It's highly likely that the creatures who use and require echolocation for survival are not the only lifeforms who will be affected, whether it be mildly or terminally! Please stop these tests altogether! Please stop this destruction! PLEASE!!! We are supposed to be intelligent beings!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Roberts (Electronic)	I support the efforts of the Humane Society of the US, who have joined other environmental and animal welfare groups to ask the Navy to consider steps to reduce	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please consider incorporating these additional measures in order to save marine life. Thank you, Martha Roberts	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Robertson (Electronic)	These tests that deafening large sea creatures is inhumane. Please stop the madness.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Robles	I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	and many other marine creatures. In the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. I ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please do what is right. I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. Sincerely, Brenda Robles	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
J. Rodriguez (Electronic)	Protect marine mammals from explosives and sonar along the East Coast» and California/Hawaii. I am opposed to all testing where animals can be harmed what is wrong with you people our food is becoming extnct our water and air is becoming poisoned. what do you think life will live on??????????	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Rodriguez	The Navy's DEIS is fatally flawed and fails to comply with the basic requirements of NEPA. The Navy's assessment of impacts is consistently undermined by its failure to	Discussion of the general topics ("panic, bubble formation and/or decompression sickness") noted in the comment were thoroughly

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	meet these fundamental responsibilities of scientific integrity, methodology, investigation, and disclosure. The Navy must revise its acoustic impacts analysis, including its thresholds and risk function, to comply with NEPA. The Navy fails to properly analyze impacts on marine mammals. For example Sonar impacts on cetaceans that are the likely cause of mass strandings are panic, bubble formation and/or decompression sickness. The following must be included in the DEIS: 1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic The following scientific papers need to be included in the EIS: J. R. POTTER;, 'A Possible Mechanism for Acoustic Triggering of Decompression Sickness Symptoms in Deep-Diving Marine Mammals' Paper presented at the IEEE International Symposium on Underwater Technology 2004, Taipei Taiwan, April 2004. PARSONS, E. C. M.; SARAH J. DOLMAN; ANDREW J. WRIGHT; NAOMI A. ROSE and W. C. G. BURNS. MARINE POLLUTION BULLETIN 56(7):1248-1257. 2008. Navy sonar and cetaceans: Just how much does the gun need to smoke before we act? TYACK, PETER L. JOURNAL OF MAMMALOGY 89(32):549-558. 2008. Implications for marine mammals of large-scale changes in the marine acoustic environment. WRIGHT, A. J.; N. AGUILAR SOTO; A. BALDWIN; M. BATESON; C. BEALE; C. CLARK; T. DEAK; E. EDWARDS; A. FERNANDEZ; A. GODINHO; L. HATCH; A. KAKUSCHKE; D. LUSSEAU; D. MARTINEAU; L. ROMERO; L. WEILGART; B. WINTLE; G. NOTARBARTOLO DI SCIARA and V. MARTIN. INTERNATIONAL JOURNAL OF COMPARATIVE PSYCHOLOGY 20(2-3):274- 316. 2007. Do marine mammals experience stress related to anthropogenic noise? FAERBER, M .M., R. W. BAIRD. 2010. Does a lack of observed beaked whale strandings in military exercise areas mean no impacts have occurred? A comparison of stranding and detection probabilities in the Canary and main Hawaiian Islands. Marine Mammal Science DOI: 10.1111/j.1748-7692.2010.00370.x The DEIS fails to address the following: other impacts on marine mammals such as stress, indirect effects, cumulative impacts, effects of toxic chemicals, hazardous materials and waste oil spills. The Navy must adequately evaluate impacts and propose mitigation for each category of harm for all species marine life. Each individual potentially federal activity that is to have a significant environmental impact should have its own environmental analysis. For example, RIMPAC and DARPA each need separate EIS's. The Navy failed to analyze the impacts on fish and fisheries. Om gum ganapatayei namaha	discussed in the Draft EIS/OEIS. In particular see Section 3.0.5.7.1.3 (Physiological Responses) for the presentation of the conceptual framework for analysis and Section 3.4.3.1.2.1 (Direct Injury). For a specific discussion of strandings, see Section 3.4.3.1.2.7 (Stranding) and note that a more detailed presentation was offered in a companion Cetacean Stranding Technical Report ("Marine Mammal Strandings Associated with U.S. Navy Sonar Activities") that is referenced in the DEIS/OEIS and available on the HSTT EIS/OEIS website (HSTTEIS.com). The three points raised ["1) Sonar caused panic reactions leading to strandings followed by death 2) Sonar caused decompression sickness (the bends) followed by death 3) The bends caused by sonar even in the absence of panic"], are covered within the material as described above. With regard to the references noted, while these particular five references were not cited, all were reviewed during preparation of the Draft EIS/OEIS except Potter (2004), which discusses a hypothesis covered in the Draft EIS/OEIS using the following more recent science and data from seven references: Dennison et al. (2011); Fahlman et al. (2006); Hooker et al. (2009); Moore et al. (2009); Southall et al (2007); Tyack et al. (2006); Zimmer and Tyack (2007). Finally, the EIS/OEIS has been created with National Marine Fisheries Service acting as a cooperating agency with input to both the Draft and Final versions. The team also includes a number of non-governmental scientists and subject matter experts.
Rogers (Oral-Kauai)	Aloha mai kakou. Aloha. I invoke the presence of my ancestors as I stand here to speak before you. I pray that they will come and stand here with me so my words will be their words. And I say, Ku`e i ka hewa ku`e ku i ka pono ku, ku`e i ka hewa ku`e ku i ka pono ku. Protest and resist the wrongs but stand for the righteousness is what that meant. I'm a Kanaka Maoli. I'm a Hawaiian nationalist. My country is kahawaii kai ana. That is what we call our country. I stand in strong protest to this. I haven't had a chance either to read the EIS, which is an environmental impact statement. And I believe that if it were a true	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	environmental impact statement then this project would not happen. Because it is impacting negatively and in a very drastic way our environment. And thinking in a Hawaiian way, it all encompasses everything; our water, our oceans, our marine life, our air, our space. Anything that sustains life is sacred in our thoughts. So I'm sorry. I hope that there could be a way that we, the people, can get together with you, the Navy, and come together with some kind of an agreement or, I don't know, some kind of compromise. Because I don't come here with any malice or hate for the Navy or the military, although there may be reasons why I could be. But I stand here with pain and hurt to know that these things can happen to us and to our environment. And, you know, war is like a kill. And I can't believe the Niihau people are supporting this because I know they believe in God, and I know they believe that thou shalt not kill. So through that aspect I think they have been misled. Please protect our island. I've been to the Marshall Islands. We went to commemorate the bombing of Bikini Island. It was called Bravo Project, and I met people there that were suffering illnesses-- Okay. So mahalo to all the people that came tonight, and I totally support all of your testimonies.	
Rogers (Electronic)	HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) Open House Public Meeting Comments from Lihue, Kauai, June 12, 2012 (This is an addition to my oral testimony given on June 12th) Aloha! My name is Puanani Rogers, and I was born and raised in the ahupua`a of Kealia on the island of Kauai. I am Kanaka maoli, a true native of Hawai`i. What you call the State of Hawaii is actually an illegal entity with no legal jurisdiction in Hawaii. Ko Hawaii Pae `Aina is the name of my country and it is still in existence. We are a neutral and peace-abiding country and therefore, we are outraged about your plans to train and test your war weapons in our country's surrounding ocean waters and deliberately cause harm to our planet and all living things that live upon it. I cannot understand why it has to be here or anywhere, for that matter; because you know deep down in your guts that it WILL cause harm to corals, whales and dolphins, natural resources, ocean minerals, and all living creatures in our archipelago, and most importantly, human life. WE STRONGLY OPPOSE THIS EIS AND ITS INTENT!! IT LACKS TRUTH AND IS A BAD IDEA! I hope you will respond to the question of whether you are in compliance with the mission of the Advisory Council on Historic Preservation (ACHP) and its Section 106 process. It is a federal mandate that you should be aware of. (See testimony from Ed Kaiwi.) I expect a response to this question, please. People in our communities are AGAINST FURTHER expansion of your presence in the Pacific and beg you to stay away from our islands and do your war deeds where there will be less harm to the environment. We already know for a fact that the U.S. military has proven to be the worse and most insidious POLLUTION dealers on our planet. Examples are, Kaho`olawe island, Makua Valley, Pohakuloa, etc. in Hawai`i; Vieques Island, in Puerto Rico; Bikini and Eniwetok islands in	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	the Republic of the Marshall Islands. This show of military dictatorship needs to cease and desist. Instead we ask that moneys expended for this project be used in projects that insure peace, benefits and well being for our people. Please stop the destruction of a living planet, yours as well as ours. Be responsible, do what is righteous and protect not destroy. Puanani Rogers, Kanaka maoli Ho`okipa Network – Kauai Ko Hawai`I Pae `Aina	
Rohmer (Electronic)	Please, do not do this. A deaf whale is a dead whale.I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Rome (Electronic)	I am imploring the U.S. Navy to re-think its plans to conduct training exercises all along the U.S. East Coast and off the coast of California and Hawaii and to incorporate additional protective measures. I know that the United States needs a strong Navy to protect our national security, but the exercises you are planning which involve the use of live explosives and high-intensity sonar are not the answer. I know that the Navy anticipates that these exercises would kill up to 2,000 marine mammals including a large number of endangered species and would include thousands of others that would suffer permanent lung damage and would permanently or temporarily deafen others. There is no reason that these mammals have to die or suffer this senseless damage to their bodies when you can lessen the impact of this damage by avoiding the most harmful	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	activities in areas used as calving grounds or migratory corridors, avoiding seasonal high-use feeding areas,creating a large safety zone around these exercises and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. These simple steps would allow for your military training exercises to go on while minimizing the likelihood that whales, dolphins and porpoises might be harmed or killed. If you must conduct these exercises, please do it in a compassionate way for the sake of the health of these creatures. The whales, dolphins and porpoises deserve to live and to have a healthy ocean environment. Please show some compassion to these creatures when conducting these exercises. It is the right thing to do.	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Romer (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Rook (Electronic)	Please do not use the ocean for military testing. Sonar and explosives have detrimental affect on ocean inhabitants. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Rosenwinkel (Electronic)	Please stop the use of sonar and explosives in our oceans! If we keep killing ocean life, we will not need the navy to protect people because we won't be here to protect!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Roth (Electronic)	As the daughter of a fighter pilot, I understand the need for protecting our country, but I am hoping that we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. For that reason, I am writing ask the Navy to re-think its plans and to incorporate additional protective measures as it conducts training exercises involving explosives/sonar along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and 5 million would be temporarily deafened by the exercises.	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. The Navy historically has recorded few to no mortalities caused from sonar or explosives. The estimated number of marine mammals sonar testing could affect is based on a scientific model, and it is only an estimate.
Rouse (Electronic)	I am writing today to ask that the Navy protect marine mammals from explosives and sonar along the East Coast and California/Hawaii. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I respectfully request that the Navy re-think its plans and to incorporate additional protective measures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Royster (Electronic)	Please consider steps to reduce the harmful impacts to marine mammals when conducting your training activites on the Hawaiian coast and Western shores of the US. These steps include avoiding the most harmful activities in areas used as calving	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. You can continue doing the invaluable work you do to protect our country AND protect animals as well. The two can coexist.	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ruehle-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Ruehle-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Ruth (Electronic)	As a southern California resident, I am extremely concerned about the NAVY's new plans to increase the use of sonar at the expense of stressing / harming and killing marine mammals such as dolphins and whales. Although, I recognize the importance of having a strong military that uses the latest technology, this should not come at an increased risk to protected marine mammals. Whales and dolphins are already facing many direct and indirect threats to survival due to commercial fishing, pollution and global warming. Since these organisms depend so highly on sound for their survival, it is unacceptable to directly and intentionally harm them. Please consider alternatives that are less intrusive to the lifestyles of these highly social and intelligent cetaceans. Sincerely, Jayson Ruth	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Ryan (Electronic)	I appreciate that the Navy is continuing to look at the issue of long range sonar effects on marine mammals. I note a story using the Navy's own data recently appeared that raised the estimates of marine mammal deaths. The story is available here - Navy Study: Marine Mammals Harmed By Training Navy Calculates 200 Marine Mammals Could Die Each Year Due To Training POSTED: 5:40 pm PDT May 11, 2012 UPDATED: 5:45 pm PDT May 11, 2012 http://www.10news.com/news/31051399/detail.html I am sure with so many clever individuals you can figure out some better way to handle this issue. Let's face facts - your navy is the best in the world, and does not need this to remain so. If it happens that there is a wartime effort that arises that necessitates the use of this technology, I'm sure a case can be made to the public at that time to do so. But in peacetime (or at least, peacetime on the high seas) this is unneeded and actively harmful. Don't do it. Thanks, Patrick Ryan	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sacksteder (Electronic)	According to the U.S. Navy's own estimates, the use of high-frequency underwater sound for testing in Hawaii, off the California and Atlantic Coasts, and in the Gulf of Mexico will deafen 15,900 whales and dolphins and kill 1,800 more over the next five years. Whales and dolphins depend on sound to navigate and live. I respectfully request that the Navy stop the process that has the potential to kill 1,800 whales and dolphins and the deafen 15,900 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands, the California and Atlantic Coasts, and the Gulf of Mexico. There has to be a better way to achieve the necessary work without this type of specific type of testing. We have brilliant scientists who I'm confident can find another way to achieve the stated goals in a more humane and thoughtful manner.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sadarangani (Electronic)	Please stop with exercises. The Navy eill br responsible for 1,600 marine mammals to suffer from hearing loss or other injury. Specially avoid explosives.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Saez (Electronic)	Dear US NAVY, I am very upset about the practices taken to conduct training exercises in the US Navy. It does not matter that this is the "way you have always done it." In this day and age, there MUST be another way to practice you exercises without any injuries to our mammals. PLEASE, do not just FOLLOW PROTOCAL. Take action to make a CHANGE. We care and this really is upsetting to many people.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Salazar (Electronic)	To Whom It Concerns: I'm really against any type of testing that kills, maims and abuses marine life. With the potential outcome of deafness, you don't know what could happen to the ecosystem. Don't mess it up. Please try to find another way to test these explosives. I can't believe in 2012 that that task would be impossible.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Salonek (Electronic)	Please stop the testing of sonar and explosives on marine life. These gentle creatures deserve to live a life of peace not be part of a barbaric Govt' test.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Salvo (Electronic)	Please stop the underwater testing in the Hawaii areas. These are beautiful creatures that God has given us to enjoy and you are endangering their well being. Future generations will no be able to enjoy them as we do. Please re-think this.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Salvo-Eaton (Electronic)	Please do not go through with actions that are "likely to adversely affect" an endangered species. I know it's the military, but how heartless can you be? You wouldn't kick an injured animal, so why would you "kick" a suffering population of animals? I think if the Navy proceeds with this course of action, I will lose faith in humanity altogether. Can't you find another test site? One that's far away from whale migration routes and breeding or feeding grounds? It's really asinine that I pay taxes and I have to explain the stupidity of this plan to you. Like explaining something simple to my toddler.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sapiro-01 (Electronic)	Please cease & desist your destructive sonar testing. I have observed its consequences along with the US Navy's attempt to cover up the damage. Navy promotion of sonar testing is self-serving--for the good of the Navy, NOT for the good of the USA or what the USA treasures or stands for. Nobody on the face of the earth has reeked greater havoc in Hawaii than the U.S. Navy, bombing Kahoolawe and killing marine mammals--and causing more long term damage to Pearl Harbor than the Japanese attack. Anti-fouling bottom paint is mostly copper sulphate, rendering all reefs in the vicinity severely compromised or dead. The cold war is over. Stop your destructive testing. You should protect and defend the US from its enemies. You should be ashamed for this. You are wrong to think my assessment is isolated. Sonar testing has sullied the name & reputation of the U.S. Navy. Stop.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Sapiro-02	Please do not move forward with your plans to "test" underwater explosives in and around the Hawaiian Islands. Knowing that these explosions will be killing, maiming and injuring the whales, dolphins and many other creatures that inhabit these waters MUST cause you to rethink this concept. These waters have been safe haven for these, our fellow intelligent beings; where they come to have their babies and nurture them. How can the Navy, and the men and women who serve therein be so calculatingly cruel about	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	these deaths and injuries? How can these inevitable deaths and injuries be considered ok on any level? I am horrified to know that this is how our government spends our money in the guise of "protecting" it's citizens.	
Saunders (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, V. Saunders	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Saylor (Electronic)	Using sonar and explosives around this beautiful island of ours, just for the sake of game and practise, is UNACCEPTABLE. Openly stating that this will kill and or injure our ocenlife is just blatant disrespect. We need to appriciate how much a healthy Eco system does for us as humans as well as islanders. Our oceanlife.already have enough to deal with concerning radiation, pollution, poaching as well as just plain ignorance. Leave these UNnecessary tactics to warfare away from our vital foodsources and delicate ecosystems. Wake up people...these things are way more important than a govrnment written paycheck.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Schaeffer (Electronic)	Protect our whales and dolphins! Do not allow anything to interfere with this vital goal!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Schendel (Electronic)	Training exercises done in the Pacific region by the US Navy should be done with thought to the marine life dwelling in those regions. With planning compassion can be shown. Isn't that a quality that goes with greatness?	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Schiess (Electronic)	Dear Sirs; Please do everything you can to save all the sea life when you conduct your tests in the oceans. We have already lost so many dolphins, whales and calves to sonar testing, fishing trawler lines and other environmental causes like plastics in the oceans. We should not have to choose between marine life and national security. Surely we can	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	work together to minimize the impacts on these magnificent creatures. Thanks for your consideration. Joan Schiess	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Schoenacher (Electronic)	It is an outrage that the U.S. Navy would continue its plan to use sonar testing, testing that could kill and harm marine mammals 2.8 million times a year over a five year period. Proposed training and testing off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. Projected damage to whales and dolphins -- through your own impact statements -- is astounding and vastly increased over previous estimates of potential harm for the same regions. The far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. Your analysis does not include reasonable alternatives to reduce the unprecedented damage to marine animals. Stationing lookouts to detect whales and dolphins -- your sorry mitigation plan -- will not achieve a significant reduction in damage to marine life. These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance is likely to be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. Even if it were fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, rather than savage torturers, it must reduce significantly the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		explosives. Any model used to predict impact is only an estimate.
Schultz (Electronic)	It is everybody's job to protect the very little nature left on this planet before it's too late. Please consider safer alternatives.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Schunk (Electronic)	I am saddened by the thought that the Navy, knowing full well, what it's actions can do to whales, dolphins and other sea life, will continue on their path of destruction, by repeatedly broad-casting high-intensity sound waves into the ocean, (home) of these mammals. Yes, the ocean is their home. They cannot escape to save themselves from these horrible sounds. They cannot escape from the dizziness they must feel as it turns them upside down not knowing where to go. They need their sonar to communicate and to find food. But you'd be taking this away from them. They won't be able to feed themselves or their babies, because they will either be dead on impact or will drown, trying to escape the terrible, deafening noise. Imagine, if you will, having the worst case of dizziness you have ever had and not being able to get away from it. You know that old saying when your on board a ship and you get the worst case of sea sickness that you want to die...the saying goes that you're afraid that you WON"T die ! It's that bad. I can only imagine if I were the whales, that the sonar waves would effect me like dizziness. As a human that is the best analogy I can come up with. History has shown that the whales will do whatever they can to get away from these man made high density sounds...and that is to beach themselves, to get out of the water, which is a death sentence since they can't live out of the water. How can you live with your selves, knowing this ? Where are your hearts ? I read about a woman who attended a Kauai meeting, that the Navy people presented. She said they seemed nice, kind and even caring about the whales. But she came away with the stark reality that these people (the Navy personal) had turned away, turned off their hearts, in order to be part of the Navy. How can you be human and not have a heart? Please come back, come back from the reality that the mammals that die are simply "collateral". Please wake up from this. This is a lie. These are your fellow creatures that happen to live in the ocean, your neighbors, your friends even. Remember, as a child, drawing pictures of your friends the whales, dolphins, sea turtles and fish? Remember the rainbow you always drew as they jumped out of the water, in happiness ? You knew, as a child, that they were your friends. Don't turn your back on them now that you are grown up. Be that child again, with all the important things you learned about taking care of our planet and the animals that live in it. Look down, you have a heart still..., it's beating, it has emotion, it has compassion. Please friends, remember you are a compassionate person. Don't allow this to happen. It's not to late. As with all things, there are alternatives. You are smart, please use your brain to come up with another way. Listen to the cry's of the animals. They need you to	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	protect them. You don't want these animals to be SO dizzy that they want to die and will. Do you, would you ? You have a heart, follow it back to your child like self again. Do the RIGHT thing. The whales need you. Don't close your eyes. Please, listen to your heart, just like you use to. Will you ? Mahalo and Aloha.	
D. Scott-01 (Electronic)	The United States has regularly and publicly denounced Japan for harvesting whales. Why does the U.S. Navy deem it acceptable to take just as many whales as Norway, Iceland, and Japan combined? What underwater threats are so great to our country that the U.S. is willing to adversely affect endangered species on a such a large scale? It is hypocritical to decry Japan while at the same time causing such harm that it further endangers listed species and prevents the recovery of the species.	Thank you for participating in the NEPA process.
D. Scott-02	What percent of the whales' population (by species) is being impacted? The sonar/electromagnetic training will adversely impact whales, which will affect their ability to eat, breed, navigate, etc. These negative impacts will directly hurt the current populations which reduce their reproductive capabilities. Fewer young will be produced thus preventing the recovery of endangered species. Surely, the military can train in a less harmful manner that will still allow for them to be combat-ready. Have population models been developed to show how they will be affected by the training activities? Will the populations be resilient to the activities? Since whales take such a long time to reproduce, I doubt that they would be capable of rebounding from such a large long-term negative impact. I believe Texas A&M has conducted harvesting models on whales that may be useful in the environmental analysis.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
D. Scott-03	Please stop this horrible act!!!	Thank you for participating in the NEPA process.
N. Scott	Please consider not testing in ways that are likely cause hearing loss or damage to marine mammals. You're smart people. Surely you can think of a way to test without	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	causing harm to marine life. I have faith in you. Please stop it.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Seligman (Electronic)	Dear Sirs, With all due respect, there is quite substantial evidence at this point, indicating the hazards facing marine life ,especially the hearing loss and navigation capabilities of whales and dolphins now as a result of not just sonar testing, but the level of attenutation being applied. Granted, if testing must be done for our nation's safety, it can be done farther from both where humans and marine life dwell in and out of the water. Sound frequencies do not stop at the water's edge, and what is known beyond a shadow of a doubt with no more research necessary, are the migrating and living hunting and dwelling patterns of these animals. that means the navy can test and go where they are not. They cannot live where food supply is not, but the testing can be done where they are not... It is not just economics. It is common sense and economics and good politics by this point. Thank you for your time.	The Navy thoroughly analyzed the potential for affecting hearing and navigation capabilities of marine mammals, as discussed in Section 3.4 (Marine Mammals). Regarding the locations where the Navy conducts it's training and testing activities; please refer to Section 2.5.1.1 (Alternate Training and Testing Locations) in the Draft EIS/OEIS. To summarize that discussion, the Navy's requirements dictate that much of the Navy's training and testing occur in locations proximate to shore-based facilities and infrastructure, near homeports, where instrumented ranges are located, and where environmental conditions maximize training realism and testing effectiveness. Those requirements preclude the Navy's training and testing in alternate locations.
Sesma (Electronic)	Please re-consider implementing these projects. They are harmful to all marine life... and by extension to all life. We are already harming ocean life in so many other ways....	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Shabad (Oral-Kauai)	Aloha, aloha. I live by that word. I've been a resident here 12 years on this island. I live in the Wailua Homesteads. And I was born in Richmond, Virginia. That was the original road to the White House. I come from the founding fathers of this country. And I didn't plan to speak. I wanted to listen. I'm here to support my kupuna, my elders, and I'm here to witness all of us, you as career people who have taken the positions that you have taken because you believe in your country, you believe you're doing good. I'm saying we stand at a crossroads now. This crossroads is about fear. I love this country. I love everything about it. And since 2007 I have not paid my federal taxes and lived on $14,000 a year taking care of my ohana. And I'm a doctor's daughter. I know how to live well. I know how to contribute to people. And I'm not saying this to get you upset. I'm saying this to get you to move. Because there is a tidal wave that's happening right now, where we're all realizing we're not our careers and maybe the powers that be, the authority figures, the organizations that we've trusted do not have our best interests in mind. And maybe there will be more of us like me that say, I can't support something that doesn't support life. And I've suffered enough. I can't live like that anymore. I have to come back. I have to participate. I have to have life, food and sustenance to feed the future that's coming. I know our children that are being born now which I take care of and the generations that come up are going to do what our kupuna are laying out for us, the people that have lived here in Hawaii that lived in a peaceful way, a peaceful fashion where we had sections where everyone governed their section, and when there was something that was important for the whole island we got together. You are part of that. We are part of that. I want you to really think and understand who you were when you got into your career and your values and your beliefs. There's a change happening. And if we all invest our time, our effort, our resources and our money, which is a big voice, in what we believe, and if we back out and say, No, I can't support that. I want to come up with a better solution. I don't want to be a rebel rouser. I don't want to be angry. I've lived in fear for six years. What if the government finds out? Are they going to put me in an internment camp? I have been ashamed that I didn't have what it takes to participate and work and work and work and pay my federal income taxes and participate that way. And I want to honor everyone here that has. I'm asking you to wake up, feel the movement, let go of the fear. We have enough. We have created enough destruction. It's time to really listen from the heart and let the intuitive mind lead the way. Thank you.	Thank you for participating in the NEPA process.
Shabsin (Electronic)	The planned testing in Hawaiian and California waters is dangerous for marine life and will undoubtedly result in unacceptedly high casualties. The sense of hearing is probably the most critical of senses for these animals. Deafening them or even injuring their sense of hearing will disorient them, prevent them from locating adequate food sources and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	affect location of others of their species. Reproduction will decline and survival on this planet for them may well cease These very animals you will harm by your testing are ones that have proven to help mankind. Do the right thing and skip the testing	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Shalat (Electronic)	The U.S. Navy is proposing to conduct training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii. These exercises would involve the use of live explosives and high-intensity sonar. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. We are calling on the	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	U.S. Navy to re-think its plans and to incorporate additional protective measures.	explosives. Any model used to predict impact is only an estimate.
Sharan (Written)	Monk seals are endangered! And I speak for the seals as they cannot speak for themselves--Monk Seals have been tracked with monitors and the attachments have needed to be removed as they were found to interfere with normal healthy behavior--sonar--can disturb their feeding and reproductive life--even if 1 of the 1,100 that still exist are disturbed that is too many--any intervention should have to prove before they test--not after and count the dead. Killing individual Monk Seals or disturbing them in any way endangers the normal behavior and is endangering the whole population.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Shepard (Electronic)	This is destructive and insane. We must protect the marine animals and your "testing" is just the opposite of that. You will harm/kill whales and other precious sea animals...for what???	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sheridan (Electronic)	PLEASE protect our marine life. Do not allow the senseless injury to these gentle creatures that live in the sea!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Shooltz (Oral-Kauai)	Hi, thank you. It feels to me like what we're talking about is a lot bigger than what we're actually addressing right here. In the past couple of years our military has been enabled to be used against the citizens of the United States. We have assassination lists coming out of our White House. We can arrest people with no cause and throw them in prison forever and have no rights at all. Each of these things starts here. And I've gone around today and talked to a number of the representatives, and each one I was struck with and they acknowledged and I could sense the concern for the damage they're doing to the sea life, the whales, the dolphins, and cetaceans of all kinds. And yet I also watched how they were able to somehow shut off that little voice in their heart that knows that that's wrong, that knows that it's wrong to take life. And it isn't just the sea life. Somehow our culture has made it justifiable to take all life. And it starts with the people working here, the Military Industrial Complex. Somehow you know in your hearts what's right, and you know that what's happening is wrong. You know that us spending five times more than the next 15 countries or whatever the numbers are is obscene. It's wrong. There's so much need in this world. And what's happening here can only keep happening if you keep shutting off that voice in your heart that knows it's wrong. You, Commander, and you, and all these representatives that are drawing a paycheck from supporting Military Industrial Complex know that supporting war, supporting death is wrong. And you know it in your heart. And it will continue until you listen to that heart and step away and stop supporting what's going on. Whatever lies you tell yourself to justify it is not true. Your heart knows the truth. It's time, really time, to listen to that now. Killing dolphin and whales is no different than killing people. It's all the same. It's all the same justifications. We're all in this together. This is way out of hand, and we don't have a lot of time to turn the boat around. We don't have a lot of time. And you're driving the boat, and we're just the voice of conscious here. It's time.	The U.S. Department of the Navy (Navy) carries out training and testing activities to be able to protect the United States against its enemies, as well as to protect and defend the rights of the United States and its allies to move freely on the oceans, and in addition, to provide humanitarian assistance to failed states. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sidenstecker-01	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sidenstecker-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4)

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Sillanpaa (Electronic)	Hawaii - Southern California training is dreadful idea. It is very harmful to the Pacific marine life, and should not be carried out. There is no humanity with it, only pitiful unnecessary showing off, trying to make the army look important but does exactly the contrary. Makes it look useless and harmful.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
K. Silva (Electronic)	I ask that you reconsider you HSTT sonar testing. The repeated use of sonar is detrimental to the marine life in the area and your own analysis indicates that marine mammals in this area will be significantly impacted by your use of sonar. Your own casualty estimates grow as your methods of determining them improves. Your effective rate cannot be estimated to be better than 10 percent. Using lookouts is a crude, ineffective and inadequate mitigation measure and has serious limitations, particularly in foggy conditions. There must be better alternatives right around the corner. You have some highly intelligent people in the Navy. I request that you put those minds together and spend a bit more time developing a system that does not have such a grave impact on the marine mammals in the area.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
N. Silva (Electronic)	Please stop hurting the animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
S. Silva (Electronic)	The incredible disregard for life continuously displayed by those supposedly engaged in the business of protecting life is breathtaking. May you get your ultimate wish, and find that there is no one left to play with but the Kochs and Waltons. I don't think there's enough alcohol on all of the planet to make that a fun day.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Simon (Electronic)	The life of a mammal is as important as any more worthless testing. Please do not undertake these life taking tests. Richard Simon	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Simonton (Electronic)	I am Military spouse and very proud to be one. I am also someone who finds that all life in all forms should be respected. I think the fallout from this project needs to be reevaluated. I know there are many things going on to protect us from enemies overseas and at home that are important, I just cannot see how the damage and destruction of life in this project can be justified. I am shocked at the Navy's estimates of the far-reaching	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	harm that will be inflicted on marine mammals during proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard, and the Gulf states from 2014 to 2019, as stated in your Draft Environmental Impact Statements. The projected damage to whales and dolphins is staggering, with 33 million instances of "take" over five years, a vast increase over existing estimates of harm for the same regions. And I am appalled by the level of carnage reflected in these numbers: over 5 million instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. Your analysis fails to present and analyze reasonable alternatives that would significantly reduce the unprecedented level of harm to marine life. The mitigation scheme that the Navy principally relies on centered on the ability of lookouts to detect whales and dolphins will not result in an appreciable decrease in marine mammal injuries. Federal courts have found this same scheme inadequate and ineffective for good reason: it is largely useless in conditions (common at sea) that impair visual surveillance, it is unsuitable for detecting cryptic and deep-diving species that spend little time at the surface and, even if it were fully effective at detecting whales and dolphins, would only protect species from the most serious injuries. I call on the Navy to identify and set aside areas of high marine mammal density -- acknowledged to be the most effective means of reducing marine mammal injury. If the Navy wishes to be seen as an effective steward of the ocean environment, it simply must take steps to significantly reduce the level of harm that training and testing activities will inflict on marine life. Thank you for the opportunity to comment.	a decade.
Simpson (Electronic)	I appreciate that the NAVY has made an effort to study the potential and recognized impacts to marine mammals and other marine life. I further understand that casualties and collateral damages to the Maritime Environment are regrettable consequences to the security and defense of our Oceans. However, wouldn't it make more sense to test the sonars in environments where marine mammals, especially whales and porpoises, are at minimal numbers, such as under the Arctic Ice Sheets during winter, or in the Great Lakes, where there are no whales or porpoises? California and Hawaiian locations are teeming year-round with whales, porpoises, seals, and other marine wildlife that are dependent upon their hearing and sonar for survival. It does not seem logical to test sonars in regions with the highest densities of marine wildlife, especially marine mammals. Whale and Dolphin's natural sonar, for instance, seems to work quite well for echo location, without harming themselves or the environment. So, perhaps the key to perfection of NAVY sonar methods should look to these animal's Natural Sonar for better solutions. The success of our Nation's security also inherently includes preservation of our natural habitat and fisheries resources. More intelligent sonar options and opportunities are out there, if you will do the research. I sincerely appeal to the NAVY to seek alternative testing areas where the impacts to harm marine life, especially whales and porpoises, will be as minimal as possible. Respectfully, Garey L. Simpson, MS,PG	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Siragusa-Ortman (Electronic)	I am saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sisson (Electronic)	It is not OK to kill cetaceans and sea mammals with your testing. It will negatively impact the health and welfare of our Hawaiian citizens as well. You need to get an EIS before beginning testing. Our citizens are against this type of warfare, or any warfare, in our local waters. We ask that you respect our health and welfare, and the health and welfare of our seas and animals living in them. Thank you!	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Skye (Electronic)	As Americans we love to chastise other countries for their ridiculous atrocities like Japan's horrible whaling activities and Canada's bloody seal clubbing. Why would the US Navy want to add our name to the list by wanting to kill, injure, or even harass the the most majestic marine mammals? Dolphins and whales are the very masters of sonar that inspired the first Navy use of sonar. It's like learning from your grandfather's stories and when you'd like to write your own stories, you start by kicking him in the few teeth he	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	has left. Please, have some respect and consideration.	EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
B. Smith (Electronic)	What if we set the standards at the level where no living things are damaged? What if we developed the technology to "hear" and "see" underwater so that it is accurate but harmless? That should be the goal. No damage to living things. No more poisoning and damaging the air, earth and sea. That should be our standard. If we made that commitment, we could make it happen. Is the Navy going to have trained veterinarians on hand to euthanize the tortured animals? It is not worth it. It has never been worth it, to poison our atmosphere and waters and lands, for war. And I mean the earth's atmosphere, waters and lands, not just the US. We need to be respectful of the planet. We CAN have it both ways. We just have to develop non-damaging technology. If the technology is not safe, and if it cannot be cleaned up quickly and completely, then it should not be used. We still don't know how to safely store nuclear waste. Is that smart?	Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
C.. Smith (Electronic)	Why murder sentient creatures except when there is a cler n present danger. Your actions are disgraceful and dishonorable. I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	marine animals.Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. Copy and paste the above comment. Please add your own comments to make it more effective. Thank you. Click here to comment.	Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
J. Smith (Electronic)	Dear Sirs, I am gravely concerned with your proposal to test with high-frequency sound waves to the extent that marine animals will be injured. We have not read the report in full, but have gathered at least this much information. If this is testing only, these Americans feel it is not worth the damage to be caused. The Manistee Peace Group claims this purpose: We advocate and educate for peace in the Manistee area, and therefore also advocate and educate for democracy, social justice, community and environmental sustainability. Please reconsider your plans so that such extreme damage will not be added to our collective consciences. With great respect for your service to our country and our world, Joy Smith, Josh and Nanci Swenson, Carol Voigts, Sister Joan Alflen, Jim Toczynski	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Smith-01 (Electronic)	Please reconsider the testing you are planning which will bring irreparable harm to dolphins and whales. It's unconscionable.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
K. Smith-02	consider steps to reduce the harmful impacts to marine mammals. These steps include	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
S. Smith (Electronic)	Please stop this senseless killing and deafening of these helpess creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Snowball (Electronic)	Please re-think its plans and to incorporate additional protective measures. Please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. I believe it is also your job to not only protect people but all living creatures. Thank you, Susan Snowball	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sokolowski-01 (Electronic)	Under kinetic energy weapon testing (table 2.8-3) HRC: PMRF is listed in both rows, should one of these locations be different from HRC: PMRF (possibly SOCAL)?	Thank you for your comment. The second row refers to activities conducted in the Southern California portion of the Study Area and has been corrected in the Final EIS/OEIS.
Sokolowski-02	The FAA representative for the Pacific reported having trouble submitting comments online. I am testing the comment functionality of the online commenting. Thank you for providing the FAA the opportunity to review the draft EIS/OEIS. At this time we have no comment regarding the proposed action. Please forward a copy of the final EIS when complete for additional review.	Thank you for participating in the NEPA process.
Solari (Electronic)	Kindly consider the negative impact that sonor has on marine life whose main communication between each other is sound. These creatures are a valuable part of the earth's ecosystem.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Spohrer (Electronic)	I DO NOT support this renewal. I did not realize that we are one of the most notorious and lethal of the "whaling" nations. ...So damn senseless. This has got to stop. These creatures are already facing serious environment degradation, their numbers in alarming decline. Stop adding to the misery. This is NOT the legacy I want for my children. --- James Spohrer	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
St Claire (Electronic)	My understanding is that the Navy itself has projected that it will make deaf 1600 whales and dolphins and kill 200 EACH YEAR IN A 7-YEAR PROGRAM in training exercises. This is only an estimate of the untold damage that will be caused to our precious and already fragile ocean environments on the planet. I ask that this not be allowed to happen. Thank you. Virginia St. Claire, M.Div.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Stack (Electronic)	It is distressing to me that whales and dolphins would be adversely impacted by these tests. The human family MUST be more aware of actions that are detrimental to the animal world. Our planet's health and human survival is related to the respect we have for our interconnectedness.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Steele (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. We know that in the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please re-think what and how this has to be done.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Stephens (Electronic)	According to the Navy's own EIS, this program will have impacts on critically important marine mammals that, while the numbers maybe uncertain, are clearly on the scale of doing significant damage to the populations in question. Given the uncertainties of scale (i.e. damage may be greater than anticipated), coupled with the accepted fact that some amount of damage will be done to these important populations, the only rational conclusion is that the program not be allowed to proceed. Besides, this program is a waste of tax payer dollars, given that no potential enemies have submarines sophisticated enough to evade more standard types of detection, i.e. detection at home ports by our own submarines. This is another DoD boondoggle.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Stevens (Electronic)	What gives the military the right to harm Dolphins and Whales? They won't even save any lives with these tests. Please don't hurt the wildlife.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Stidham (Electronic)	PLEASE do not conduct Naval testing in areas that could harm or torture marine life. I fully support our military and know that the need of protecting our nation is of great importance, and I immensely admire the dedication of our armed forces, but there has got to be a better way, one that we as a humane nation can feel proud- knowing we did not kill or harm these magnificent creatures God has given us. Lets not take the atrocities of mankind out on these sea creatures. If you do this, it will spread fast, citizens will find out, and you will lose support and respect of millions of Americans. This is our country, and we do not approve this type of vulgar and inhumane testing! Please listen up and do us proud. We are Americans for crying out loud, and you can find ways to do this without murdering God's creatures-who do we think we are to even think about doing this? Thank You, A very concerned Citizen of USA, California	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Stocker (Electronic)	I find it totally unacceptable and even hideous that man kind would knowingly harm another living creature. Please find another system. Develop different technology. There are no excuses for this.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Currently, sonar is the best technology available that can help keep Sailors safe from mines and hostile submarines.
Stokesbary (Electronic)	Aloha Navy, Please stop your sound testing in the ocean. This is wrong, what happens to the eardrums of the whales, dolphins, & seals. I ask that you stop this nonsense. Thank you for adhering to my request. Enjoy being in the navy our ocean. Please take care of it's inhabitants. Mei-jen Sun Stokesbary, L. Ac. Big. Island	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Stone (Written)	I can't understand how any human being can give any sound and thoughtful reason for killing or harming anything. Aggression and ardency in any form comes from ignorance of our own desire for understanding of our needs and meeting them in a way that respects others, honors their place in our world. We share planet earth and need to support and care for every living being on it. When over half of the U.S. budget is going to military budget with careless war as the seeming objective, isn't it time to find a better	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	way to operate in the world than global occupation by the military? U.S. spends over $487 billion on War in Iraq which UN estimates less than half could provide clean water, adequate diet, sanitation services and basic education to every person on the planet. Paraphrase John Parkins author, "Confessions of an Economic Hit Man"	
Stone (Oral-Kauai)	Hi, I'm Mary Stone, and I printed this out so I will remember everything. I can't understand how any human being can give away -- give any sound and thoughtful reason for killing or harming anything. Aggression and violence in any form comes from ignorance of our own desire for understanding of our needs and meeting them in a way that respects others, honors their place in our world. We share our planet Earth, and we need to support and care for every living thing on it. When over half of the U.S. debt budget is going to the military budget with an endless war as a seeming objective, isn't it time to find a better way to operate in the world than universal occupation by the military? The U.S. spends over -- or spent and is spending billions, specifically this man says 487 billion in the war in Iraq, which the U.N. estimates less than half of that could provide clean water, adequate diet, sanitation services and basic education to every person on the planet. So this was from a book by a man called John Perkins, title of which is Confessions of an Economic Hitman. So my point is that I just wonder why we need to militarize our Pacific. I don't feel that that's accomplishing the future that we want for ourselves and the rest of the living organisms on this planet. Thank you.	Thank you for participating in the NEPA process.
Strang (Electronic)	Please consider the marine mammals that will be in danger during your tests. Consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Stratton (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless these safeguards are in place, do not allow Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Strom (Electronic)	Please re-think your upcoming training and testing during July and place into your procedures those standards which will protect or eleviate the damage to marine mammals populations in the areas you plan your activities. Thank you for your time. Rivka Strom	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Suarez (Electronic)	Por favorrr.....salvemos nuestro planetaa dont kill inocent animals just for money,power ,please we are humans	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Sumner (Electronic)	To Whom it May Concern: My comment was originally for the East Coast, if you could forward it along, it appears they've removed the comment section from that site. But just the same, my comments would also apply to the military games proposed for the West Coast as well, so please include them. While I have no doubt that these military training exercises are necessary and that every precaution would be taken to minimize the effect on marine wildlife in the areas, I believe the military is miscalculating the acceptable risk relating to the lives and well-being of the animals living within the proposed test area. These sonar and explosive tests WILL result in the needless injury and death of countless dolphins, whales and other marine mammals including some that are currently listed on the endangered species list. Any loss of life is unacceptable, and I would expect the Navy, which should have a deeper understanding of the global effects of the marine ecosystem, to know that. I'm sure that a lot of people have filed complaints about this, I know I'm not the first. I would like to, however, propose an alternative suggestion the military may not have considered yet. How about running these tests in waters that are closer to areas we are actively engaged in military combat. Sonar equipment or a torpedo with an active explosive may behave differently in our waters than they do in, say, the Arabian Sea. Conduct the proposed military tests there, destroy their fragile ecosystem, kill off their marine mammals. Besides, if you're going to have such an expensive [expletive deleted] contest, wouldn't it be better to do it in the other guy's yard? Thank you for your time and consideration of my concerns involving the EIS/OEIS. Justin Sumner	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Sund (Electronic)	Please add my name to those opposing any more sonar testing in the ocean.	Thank you for participating in the NEPA process.
Suppers (Electronic)	Please do not proceed with these tests - killing innocent creatures is never acceptable, in the name of war or security. The price for this type of testing is too high a cost in lives lost and the effect it will have on the environment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
A. Sutherland (Electronic)	National Security is important; that's a given, but at what cost to our environment and the majestic ocean creatures that help keep it diverse. If we keep disregarding the world we live in, what will be left to protect?	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade. The Navy shares your concern for marine life. All of the reasonably foreseeable effects from Navy training and testing activities were analyzed in Chapter 3 of the Draft EIS/OEIS. Also, as described in Chapter 5 of the Draft EIS/OEIS, the Navy implements, to the maximum extent possible, mitigation measures during its training and testing activities.
S. Sutherland (Electronic)	All life is to be respected, honored and protected if we are to survive as a species. This included the animals of the seas. Please honor yourself and others. It is my request that you stop this sound testing now. Some one has to turn the tide and you are in this position to make this happen. Thank you.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Sutton (Electronic)	Ladies and Gentlemen, I am a US citizen, and a frequent visitor to the Pacific region, especially Hawaii. I love and enjoy all the wildlife and ocean life there. I consider the whales, dolphins, seals and other marine creatures a tremendous national treasure to be preserved. Your plans are the opposite, by your own research --- to kill, wound, injure and even torture these animals in the name of national defense. This is a deeply misguided project and way of thinking, Please find some way of doing your job without disrupting our oceans and killing innocent creatures needed in the web of life. This is exactly the approach that has brought us to the edge of ecological disaster and species extinction in many cases. How will you explain this cruelty to your grandchildren? To my grandchildren? Where is your humanity and respect? Please end this misguided testing and tactics, and place money where it is really needed and do some Good for the world. Thank you, david sutton	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Swanson	My comment is relatively simple and should be understood by anybody considering an	The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	operation that DOES NOT have to kill so many living beings. Compassion for animals is common among the good guys, but not among the bad ones. One of the surest signs that a biblical figure is a player in God's redemptive plan is the person's decency to the beasts of the field. Humane treatment of animals is seen here with Noah and will be repeated by Moses, Rebecca, Laban, and a host of others. It is not a coincidence that Christ is referred to as the 'Good Shepherd'. As St. Francis of Assisi said: "If you have men who will exclude any of God's creatures from the shelter of compassion and pity, you will have men who will deal likewise with their fellow men." Respectfully, Charles Swanson USAF Retired officer	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Swing (Electronic)	Please stop these tests. Our marine life is endangered as it is and cannot afford any more deaths.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Swingle (Electronic)	I am opposed to the proposed training exercises on the coast of California and Hawaii. I understand that these exercises would involve the use of live explosives and high-intensity sonar. According to your estimates, the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Thank you for your time and consideration of this important matter.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Switzer (Electronic)	Whales are the most magnificent creatures on the planet. I am proud of much of what the navy accomplishes and represents but I am concerned about the well being of our fellow creatures. Please do all you can to prevent harm to our environment. Especially the whales. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Szeker (Electronic)	please stop this testing!!!!!!!!	Thank you for participating in the NEPA process.
Tallman (Electronic)	Please protect the marine life and not harm them. We need them in our eco system. Please find another why for your project.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities.
Tauger (Electronic)	The EIS/OEIS is OUTRAGEOUS AND ABUSIVE. Testing sonar at the risk of sea mammals is intolerable, and must not occur! Please STOP THIS!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Taylor-01 (Oral-Kauai)	Types of impacts, all potential impacts of the project, both direct and ultimate or long term must be considered including cumulative and growth-inducing impacts. Indirect impacts, if social or economic changes can directly cause environmental effects. These effects must be considered. Mandatory findings of significance, impacts which will substantially degrade the quality of the environment, substantially reduce the habitat of the fish and wildlife species that cause fish or wildlife population to drop below self-sustaining levels threaten to eliminate a plant or an animal community, reduce the number of -- restrict the range of a rare or endangered plant or animal. The study needs to look at the normally significant impacts, which is in conflict with adopted community environmental goals, degrade or deplete the natural resources include the wildlife, rare plants, habitat, water, air quality or prime ag lands if they're included.	Chapter 3 of the Draft EIS/OEIS provides discussion of the affected environment and environmental consequences, including socioeconomic impacts. The cumulative impacts are analyzed in Chapter 4 of the EIS/OEIS.
K. Taylor-02	But whether or not it induces population growth or concentrations, substantially increased traffic or ambient noise, specify in detail a map showing the location and boundaries of the project, a statement of project, a statement of the project objectives, a description of the projects' technical, economic and environmental characteristics. Project alternatives must discuss both mitigation measures and alternatives to the proposed project. Obviously a no-project alternatives must be looked at and each alternative must be described in sufficient detail to permit comparison with the proposed	Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS/OEIS provides a figure showing the location and boundaries of the Study Area. Chapter 1 of the Draft EIS/OEIS provides the Purpose and Need of the EIS/OEIS, the environmental planning process, and the scope and content of the EIS/OEIS. All of the alternatives are analyzed in Chapter 3 and the mitigation measures are described in Chapter 5 (Standard Operating Procedures,

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	project. Thank you.	Mitigation, and Monitoring) of the EIS/OEIS.
S. Taylor (Electronic)	By your own accounts, the current form of planned naval testing in the ocean would be devastating to an incredible number of marine mammals. Knowing this, I cannot even comprehend how you could think that this is acceptable, national security or not. If we survive at the cost of loosing site of the value of other forms of life besides human, then when we begin to feel the results of the loss of our delicate environmental balance - we should deserve every single misery that it creates. We are disrupting the earth's natural balance that has kept us alive for centuries. BEWARE. This disregard for it will bring your future children's generations nothing but strife and heartache. PLEASE REVISE YOUR PLANS TO OPTIMIZE CARE AND RESPECT OF OTHER LIVING AND PERHAPS MORE INTELLIGENT THAN US.....BEINGS!!!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Teixeira (Electronic)	killing lives and the planet just because of stupid navy exercises?? Please, are you people totally crazy????? do you want to destroy the all planet once and for all??? disgusting!!! its because of people like you that we still have all this wars,deaths and destruction in the world! cant you learn how to be good? how to share with others? how to live life peacefully and respect all kinds of life??? i´m sorry, but i need the planet to live, who tha [expletive deleted] do you think you are to take away my right??????????? FROM THE OTHER SIDE OF THE WORLD, PORTUGAL	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Terrell (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Linda Terrell	conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
A. Teubner (Electronic)	Unacceptable !!! We know better. The Navy needs to stop this now !	Thank you for participating in the NEPA process.
C. Teubner (Electronic)	Please please save our most important natural resources!!! Thank you. Chris.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Theis (Electronic)	Please find a way to conduct exercises that will not harm so much life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Thelen (Electronic)	stop the navy experiments as long it kills our all sea life.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Thiruvengadam (Electronic)	Aloha! I live in Kona & have enjoyed the marine life here for many years. I was moved to share my humble opinion in the face of a situation that I do not know much about. I believe marine life is affected by sonar use & I feel if concerned citizens do not speak up for them then they have no voice. So I hope there can be precautions taken to prevent harm to the marine life and research done on the effects this sonar has on marine life. I am interested in balance and mindfulness when considering impacts on our Earth & if these comments from concerned people help to support & protect the life in our seas I feel that would add to balance in this world. Mahalo!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tierney (Electronic)	Please actively take steps to reduce sonor and other technologies' harmful impacts to marine mammals. These steps include avoiding harmful activities in calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Timmerman-Thurstin (Written)	We understand that the Navy is moving ahead with plans for sonar and explosives training that threaten to deafen, injure and even kill countless whales, dolphins and other marine mammals. Starting in 2014, the Navy will harass, injure or kill marine mammals more than 33 million times in both the Atlantic and Pacific Oceans during its five years of testing and training with sonar and explosives. These alarming numbers come from the Navy itself. Inflicting such tremendous harm on marine mammals is simply unacceptable. Entire populations of marine mammals will be affected. Navy ships will flood millions of square miles of ocean with high intensity sonar, which is known to cause disorientation, hearing loss, stranding and death in whales. The Navy is supposed to be protecting people and mammals, not destroying them. Please stop the killing and harming of our animal and human populations, and stop destroying the environment that these are dependent upon for their survival. Thank you for your attention.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tinch (Electronic)	This is impacting marine life in an alarming way that is totally unacceptable. Please stop these exercises.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Tisue (Electronic)	Dear U.S. Navy, Please protect marine mammals from explosives and sonar!!!!! We cannot do this! The negative environmental impact on marine life needs to be stopped!!!!!!! Protect our planet and its inhabitants!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tomasini (Electronic)	While I do appreciate the United States Navy's mission to serve our national security interests, I strongly believe that we need to do all we can to ensure that we are not causing damage to the natural environment, especially intelligent and wonderful creatures like whales and dolphins. If this means it will cost the government more to operate in an enviormentally safe manner, then please use my tax dollars to protect our precious world for our future generations. Thanks for this forum. Read the Earth Charter Iniative, this document says it all.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Traina (Electronic)	Please find another way to do your testing that does not involved the harming and death of dolphins and whales. We cannot, as human beings, keep treating the planet with such disregard and expect to be able to continue to live here in peace. Thank you for being kind stewards of the water that we all love here. Diane Traina	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Trombly (Electronic)	Please do not do ANY sonar testing in our oceans! We, as humans, have a jump first, then look mentality. Protecting our oceans is as important as protected lands and I do not feel as if ALL of the harm that will be done to marine life has been taken into consideration. At this time, we have enormous ocean pollution, I am thinking of garbage specifically. More specifically, radiated garbage from Japan. This, too, will be affecting the ocean wildlife. As a suggestion, our Navy can be tasked with finding an environmentally friendly solution to this problem. Why are we spending taxpayer money to scramble ocean creatures' brains, hearing, causing more death and detrimentally impacting the oceans' food chain? My last point is that on land, we have noise pollution laws. It is time to set some rules about underwater noise pollution because that is what the Navy is planning to do. Sincerely,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
L. Tucker (Electronic)	I cannot imagine any greater damage being done through unnecessary noise pollution to our very valued whale and dolphin species. I am in the hearing field. I see patients daily who have damaged hearing due to noise exposure. Please don't inflict this damage on unsuspecting innocent creatures.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
T. Tucker (Electronic)	Please think. This is sooooooooooooo simple. Please ask your children and grand children. They can figure it out.	Thank you for participating in the NEPA process.
Tumey (Electronic)	Those animals are our country and the worlds' resources. If we harm and probably kill them (since many use sonar to find food they won't be able to eat) kill them whole sale we are destroying delicate ecosystems that humans rely on for food - not just the United States but all of the countries that fish in the Pacific Ocean. This technology has the possibility of directly impacting the worlds' future food resources. By harming this many animals we will affect many food chains in the ocean. This is Russian roulette with the environment of the Pacific ocean which is already impacted by over fishing and global warming. Please do not proceed with this program. The Navy's highly scientific guesses as to what will be impacted are limited by our present understandings of the interactions of various species and their impacts on the ocean. It is extremely difficult to extrapolate the full effects of this technology on our environment. This isn't worth the severe harm that could be caused.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Turchek (Electronic)	As a concerned citizen, I am urging the U.S. Navy to reconsider it's use of explosives and sonar along the waters of Hawaii and California. Please consider the effects of this testing on the animals living in these waters and work to find better alternatives.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tutt-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tutt-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Tyson (Electronic)	The highest authority is life and love. To kill and deafen, one and the same to ocean mammals, is destruction and possible near extinction of helpless beings, deserving protection, not endangerment by military forces. Humanity has awakened to the realization that war is business for profit. Killing life for profit is inhumane and not required, unless the military is doing the dirty work for the elite. Come now, is destruction of life worth profit? How much more do you expect us to endure? Humans must turn this around now. If you have any awareness of your heart and love, inside of you, please end this plan. Wealthy war profiteers can find other ways to squeeze the final wealth from their contrived economy. Please, protect the ocean life from harm.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Uliana (Electronic)	In behalf of the valuable creatures of the ocean, please stop these horrible, horrific trials. No one wants to have their children deaf and if deaf to fend for themselves without being able to hear in a world that requires hearing for their survival. This is no different than the medical doctors doing exploratory surgery on humans during world war 11. We need to care for others not kill and harm them and that means other mamamals. Are we that inhumane to not recognize this horrific damage, They can practice and train on computers, not on life. That's what computers were made for. Real life training can be simulated. These sonar activities are absolutely, unquestionably wrong, unjust, unfair, criminal. Those involved in these trainings are indifferent and don't have the courage or guts to object. They follow orders mindlessly. Then they are no different than the SS soldiers sending lives into the gas chamber. This is absolutely wrong and needs to stop	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	now. What more comment do you need. There is no justification for it especially when we have computers and simulators. No argument, money or rhetoric or sophistry justifies for these atrocities. Please stop. I'm one voice, but I speak for all those creatures who we all need to speak for. This is beyond criminal.	conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, "Today's simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Valdez (Written)	Opposed. Our islands are in eminent danger of destruction by military forces and heavy development. We rely on the sustainability of our fishery. A'ole to any kind of sonar testing.	Thank you for participating in the NEPA process.
Valentine (Written)	Opposed.	Thank you for participating in the NEPA process.
Valenzuela (Electronic)	Dolphins & all marine life belong in our oceans. We should appreciate the beauty they give to us by being themselves. We shouldn't invade their homes, just as we wouldn't want our own homes to be invaded. We need to protect them & not hurt them.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Valerio (Electronic)	Please look at what you can do to minimize the impact that your testing will have on marine life. I am shocked that by your own numbers, thousands of animals will be killed or harmed. This is simply cruel and unethical. You're a smart bunch of people; please use your intelligence to do a better job of protecting our fragile ecosystem and the animals that inhabit it. Thanks much.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Van de Bijl (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, Maartje Van de Bijl	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Van Dinter (Electronic)	I'm writing to voice my opinion regarding Sonic research as it is currently done and that will be done in the future. If Boeing can build the 777 from the bottom up using simulations why do we have to do so much damage to the sea? In more so why to we have to do it in places that are still worth going. There are whole islands of trash out there, can't you just blow up that? Or Jersey Shore?	Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments.”
Van Doren (Oral-Hilo)	My name is Mark Van Doren. I'm the state co-chair of the Green Party of Hawaii. I just have a couple of brief comments. I would like to bring up that KABC put a news release out that I believe you're aware of probably, maybe not, last month, May 11th, and they brought up the fact that last year -- and I met several of you at the meeting last year, the scoping meetings. The Navy analysis for 2009-2013 estimated injury or death to marine mammals to be about 100, of course unintentional. Now this year, one year later, they have revised that to say -- to calculate that explosives could potentially kill more than	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	200 marine mammals a year. So from 100 to 200 a year is about 100 percent off, and I'm just concerned about what might happen next year and, you know, if these figures are accurate at all. Now, I was inside, and they were showing me that this study area for Hawaii, the Hawaiian area, actually they told me that the sonar was actually done very close, in a much smaller area close to the islands, and which is exactly where the humpback whales spawn or -- spawn, I believe, or mate. Anyway, I was hoping that the Navy could possibly go elsewhere with the sonar on that. And I'm concerned about cumulative effects. I don't think -- I'm sure the Navy is very concerned about this, but we have fishermen impacting that area. We have illegal activities impacting that area, and just cumulatively I'm very concerned about marine mammals. So I hope you consider these comments. Thank you.	measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Van Gampelaere (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, Tommy Van Gampelaere yours,	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Van Hoepen (Electronic)	Please consider using alternative testing methods.The proposed training exercises all along the U.S. East Coast and in the rich marine environment off the coast of California and Hawaii,involving the use of live explosives and high-intensity sonar could kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy shares your concern for marine life. The analysis and the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. These tragedies can be avoided if alternative methods are considered.Our National Security is of utmost importance,however there has to be a way to be able to preserve our planets oceans and marine life while protecting the country. Please consider taking steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Please consider !! Thank you for reading and your consideration. From a very concerned citizen, Karen van Hoepen	science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Van Dieren (Electronic)	Please cancel planned under-water explosives/sonar exercises along the Eastern Seaboard and California and Hawaiian coasts to avoid harming and killing marine mammals. These exercises can be modified to avoid such destruction, and proceed later. In the past whales stranded and died in the wake of major military sonar exercises, bleeding from the ears and additional tissue damage, for example: Beaked whales died in the Canary Islands following sonar exercises. Panicked orcas and porpoises fled off Washington State in 2003. Dozens of whales (including pregnant females) from several species died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. Please cancel the planned exercises and take steps to protect marine mammals, such as: Avoid the most harmful activities in areas used as calving grounds or migratory corridors and seasonal high-use feeding areas. Create a larger "safety zone" around the exercises using aerial or acoustic monitoring to determine whether marine mammals are nearby. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Vasic (Electronic)	We understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. Stop using high intensity sonar testing and live explosions near important whale and dolphin habitat. This is ridiculous, please stop this before you start.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Vecchione (Written)	The Coronado Shores newsletter said that the Navy was asking for comments on how your military training will effect the environment. As a US citizen and a condo owner at the shores I say DO WHAT YOU HAVE TO DO to maintain military superiority on the seas. Some people worry more about the environment than maintaining our freedom. If the environment has to suffer a little to keep our military strong, then __ _ the environment. What good is a "clean" environment if we lose our freedom. Do what is best to keep us strong; every red blooded American should back you on this 100%	Thank you for participating in the NEPA process.
Vele (Electronic)	Your testing of weapons in our oceans will destroy everything. Take care of our oceans and have some respect.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		to protect the marine environment while training and testing for nearly a decade.
Verde (Electronic)	I am opposed to the proposed training exercises involving explosives and sonar along the east coast and off the California and Hawaii coast. It is well known that these areas are rich in biodiversity and in particular as migratory routes, breeding grounds, and feeding areas for whales and dolphins. This is not a sound idea at all.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
VerVynck (Electronic)	Please re-think your plans in order to protect the marine life from explosives and sonar.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Vicente (Oral-Hilo)	My name is Dwight Vicente. I am representative of the Hawaiian Kingdom at this time, and I'm going to point out some of the history of this kingdom. In 1820 the United States dropped off a naval spy at Oahu. In 1825 a U.S. Naval officer signed the first treaty with the Hawaiian Kingdom, which is all illegal, and every treaty that the United States signed ever since violated the U.S. Constitution. So between the Hawaiian Kingdom and the United States government, there was no valid treaty. Even in 1887 the Reciprocity	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Treaty to have the U.S. Navy stationed at Pearl Harbor violated the U.S. Constitution Article I, Section 8, Clause 2 -- let me stand to correct myself -- Clause 1, Duties, Imposts, and Excises. They was trying to evade paying those taxes from a foreign country, importing stuff into the United States, and it violated Article I, Section 8, Clause 17, needful buildings, arsenals, dock yards, that are going to be purchased with the consent of the legislature of the state, and they only got 13 states. They cannot have them by treaty in a foreign country. What the United States has been doing since 1787, they have been using the Northwest Ordinance of 1787 to accomplish a lot of illegal things which the Articles of Confederation prohibited and/or the U.S. Constitution prohibited. That's where they got the extra powers to do things. That actually is a violation of the Constitution. So you always got to be looking at which document are they speaking of, the Constitution or the Northwest Ordinance of 1787. A lot of the history the United States has is based on the Northwest Ordinance being that it only has 13 states and 37 are all unincorporated states under the Northwest Ordinance. And when you're going into other countries or even colonies, they've been using that ordinance. Most people refer to that as the Monroe Doctrine. That's how the United States has been taking its military way beyond what the constitutional authority gives them. The U.S. Navy is only the prosecuting (inaudible) on the high seas only. The Army is only in the United States, which is 13 states, and they have attached land forces with the Navy, which is illegal. They're separated in the Constitution, and there's a reason for that. It's because in the Declaration of Independence, they opposed the king's taking the standing army over to the 13 colonies, so that's why it's separated. The United States applied the Northwest Ordinance here to the kingdom in 1787 by first its businessmen here in Hawaii, Hawaiian Kingdom, brought over mercenaries from Europe, and that's how they accomplished the Bayonet Constitution. They wrote the 1887 Constitution for the Hawaiian Kingdom with a gun, and with that, it signed an illegal treaty, which is the Reciprocity Treaty. So the United States actually took over the kingdom in 1887. The only thing was left to do was to remove the queen in 1893 when she signed the lottery bill into law on the morning of January 13, and on the 14th, U.S. Minister Stevens landed an illegal standing army that was on board a Navy ship that was illegally stationed at Pearl Harbor, and that was how history started here with the takeover. So we've been under it ever since, the Northwest Ordinance, and that's why they have all the military bases here, which violates the U.S. Constitution. So I guess I'll end by reserving the rights of this kingdom under the Queen's Protest of January 17, 1893, against U.S. Minister Stevens. It has yet to make its way to the U.S. Supreme Court, Article III, Section 2, Clause 2, original jurisdiction but limited to U.S. ministers and consuls. Thank you.	
Vilello (Electronic)	PLEASE don't do it!! please don't harm the whales and dolphins	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Villasenor (Electronic)	The planet's cost of ocean sonar testing will be the lives of thousands of dophins and whales. The imminent vanishing of thousands is a known result. What are the long term effects? A planet devoid of these beautiful mammals? It is appalling and shocking to learn of the intended sonar testing in our oceans. My family, and surrounding community is horrified by the notion that our very own military is planning to pollute the oceans with sound so drastically as to committ mass homicide upon nature's creatures. Especially if this is an avoidable consequence. We would like to know that our honorable U.S. Military is seeking alternatives and will not proceed until all options are investigated and exhausted. Thank You. Concerned whale and dolphin watcher in San Jose, Calif.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Vincent (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us, yours, ...	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Vlach-Lasher (Electronic)	I am asking you to please consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Vogelgesang	Don't screw up the marine mammals any further than everything else man is doing to the oceans already are. Please reconsider the explosives and sonar exercises that are	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	being planned for military purposes--there's got to be a way you can conduct some of these exercises that doesn't impact wildlife to the extent that the current way does. I'm sure you're looking at this and other letters expressing similar concerns as a joke, but try not to laugh and actually consider what you're doing to the environment. I realize that you don't give much of a thought to the environment and view all conservationists & environmentalists as crack heads that you can sit back and laugh at, but please try to take this seriously. The animals are important too---it's not just humans who live on this planet, and some of the species that will be affected are endangered.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Vollmer (Electronic)	Please I ask you to protect the marine mammals from explosives and sonar, it is so very important.....have mercy on these wonderful animals, please, please, please!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Waggoner	Please incorporate greater protective measures for marine life into the proposed training exercises off the coast of California and Hawaii. According to the Navy's own	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
(Electronic)	Environmental Impact Statements, the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. The massive harm to marine life that these exercises will cause is unacceptable. Please incorporate protective measures such as: avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Such measures will still allow military training exercises to proceed, but will minimize the likelihood that whales, dolphins, and porpoises might be harmed or killed. It is well-documented that in the past, military sonar exercises have caused injuries, death, and terrible suffering in marine life. For example, whales have stranded and died in the wake of military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. Please do the only right thing, and incorporate additional protective measures including those outlined above. Thank you for your consideration.	All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Wagner (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. We look forward to hearing from you with your views on the above, if you have any queries please do not hesitate to contact us. Yours, Stacy Wagner & concerned animals of the ocean	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wagoner (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Genesa Wagoner MD	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wallace (Electronic)	Please consider placing safeguards in place during military exercises along the East coast and California and Hawaii for innocent marine wildlife. There are measures that can be put in place and still allow the exercises to take place. Thank you for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Wallis (Electronic)	I am writing to ask you to stop the killing of 1,800 whales and dolphins and the deafening of 15,900 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands, the California and Atlantic Coasts, and the Gulf of Mexico. These	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	numbers, from your own estimates, are uacceptable, and completely preventable. Whales and dolphins depend on sound to navigate and live, and our scientists and researchers are intelligent enough to offer humane alternatives.	development of alternatives. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Walsh (Electronic)	PLEASE no testing. The Navy's report states that the exercises could cause 1,600 marine mammals to suffer from hearing loss or other injury from its use of sonar and explosives each year for the next five years. The report also projects that 200 marine mammals will die each year.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at:

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		[http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Wargo (Electronic)	I would like to comment on the environmental impact statement that you are going to kill a astronomical amount of marine animals, including endangered species. I request first of all that you find alternative means to do this - and drastically reduce the amount of collateral damage to other beings who live in the sea. If you must conduct exercises they should be done far and away from important calving and feeding grounds. I really think its ridiculous in this day and age that the US Navy - the strongest and best Navy in the world cannot come up with an alternative solution. I respectively ask that you do everything possible to not kill marine animals. They have enough pressures without man adding needless ones.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
D. Wasson (Written)	The extensive EIS as prepared in this report violates the constitutional rights on international, national, and nature rights, and origin in regards to the extension of the continental land boundaries and nature spaces and all items in the sea. The extension of boundaries from the continental U.S. to and near the Hawaiian archipelago violates international which the U.S. government was a signator o the protection of nations to the 200 mile limit. The U.S. government must cease and desist breaking its own laws. Although I am a Hawaiian national my American citizenry was forced on Hawaiian nationals like myself. This proposal violates legal, judicial, international law of compliance and I have no choice but to oppose this EIS. The natural, physical, legal,	Thank you for participating in the NEPA process. However this comment is outside the scope of this EIS/OEIS. Please see Chapters 1 (Purpose and Need) and 2 (Description of Proposed Action and Alternatives) of the Final EIS/OEIS for a clear definition of the scope of this project.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	political, and spiritual laws are violated in this report. The rights of native tenant rights such as fishing, water, gathering, and access will be violated.	
M. Wasson (Electronic)	It's a sad state of affairs that our government in the name of almighty power systematically kills animals that cannot speak for themselves. Has our nation become so power hungry and uncaring that we don't care about the collateral damage. We are killing our planet. It's morally and ethically wrong. Permanently deafen????? How are these animals to survive without their hearing, that is, if they aren't killed first? The war machine is an evil creature created by man, wiping out anything good and beautiful in it's path.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
D. Watson (Electronic)	We the people and mother earth do not want your test there is no need for it the harm use people are doing to life and earth is sending us all to death we are the poeple when we come together as one you will not win do you people have kids and family of your own im sure you do. Do you not care about them and there future as thats what people like you are doing destroying there futures so sad to see things like you are on this planet	Thank you for participating in the NEPA process.
H. Watson-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
H. Watson-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
J. Watson (Oral-Kauai)	Thank you. My name is Joe Watson. I live in Kapahi. I'm here to read the words penned by a friend, Steve Backinoff of Kilauea, who had to leave. I am very concerned about the impact of sound and weapon testing on marine mammals and other sea life as well as humans. In the research I have done I have some documentation that some of the experts who have claimed that whales and dolphins are safe in relation to sonar testing are working under government grants or universities so they are biased by their funding resources. I am strongly for decreasing military expenditures and reallocating those funds to programs that will improve conditions for peaceful communication. Most people just want a safe home with food to eat, and that is much less expensive than high-tech weaponry and protective weaponry. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Regarding bias in the Navy's analysis, in conducting the analysis of impacts to marine mammals, the Navy uses hundreds of peer-reviewed scientific research studies.
P. Watson (Oral-Kauai)	I'm Peggy Watson, Kappa, Kauai. I am voicing our extreme concerns with the U.S. Navy plans to continue the sound testing in Hawaiian and California waters. The Navy has presented this program with an opportunity for the community to respond, and thank you for this compliance. I come as a voice for cetaceans as well as all of humanity which will be affected if this program ensues. I am here today to offer a bit of history that will show proof that the Navy has shown in the past that their beliefs in what they're testing brings to our future was not correct. Commander Robert L. Reaser served in the Navy in what they called Operation Crossroads. He served on the U.S.S. Burleson for the Bikini resurvey to assess the damage of the atomic bomb to warships, to equipment and to animals. He was given a commendation for this service. It was signed, if you want to check it out, by Executive Officer Captain Deaeder. As an older officer, my father volunteered to go to this duty because my twin and I were in high school and he and mom did not need more family. The Navy had promised its volunteers that they would be	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	sterile for life if they went into that theater. Younger men did not want to volunteer. I have a kid brother who was born in 1954 which proved that the Navy had no way of knowing the effects of the testing on the future. The sterility wore off. Why should we believe our planet does not face a clear and present danger by these tests? The Navy projection that yearly 1,600 cetaceans will be deaf, which I understand, and 200 will die yearly in a program designed for seven years. Quick math spells 11,200 deaf cetaceans and 1,400 dead ones. Cetaceans do not live without sound. How dare they? You the Navy. How dare they design a program to kill any species that has gifted so much to our planet? How dare they use our government monies for this slaughter in the name of defense? Thank you, the Navy, for allowing us to feel this outrage and to respond with these feelings. What will you do with our concerns? As spokesman for the cetaceans we ask that you use the funding more wisely to assist the cleaning up of our oceans to make a better world for our beloved peaceful cetacean community and to stop turning our beautiful Hawaiian Islands and California seas as a theater for war exploration. We ask that to remember, as the dolphins have said, we are here. Thank you.	
Watts (Electronic)	The Navy's training and testing will harm more than 50 species of whales and dolphins, including eight protected by the Endangered Species Act, such as the North Atlantic right whale (one of the most critically endangered whales), blue whale (the largest animal to have ever lived on the planet), and sperm whale (including populations harmed by the BP Deepwater Horizon disaster). Please reconsider these tests, and think about other species. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Webb (Electronic)	The negative impacts of sonar and seismic testing in ocean waters on marine mammals is well documented in numerous government and institutional studies. (One such reference was conducted by the U.S. Geological Survey for the National Science	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Foundation at http://www.nsf.gov/geo/oce/envcomp/usgs-nsf-marine-seismic-research/nsf-usgs-final-eis-oeis_3june2011.pdf). These impacts are far ranging and can be damaging and lethal to marine mammals, fisheries and other flora and fauna in the ocean. The benefits of this testing is far outweighed by the damage and destruction of the life in our oceans. The only responsible action is not to use this lethal technology.	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Webber (Electronic)	Please discontinue any activity harmful to the whales.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Weed (Electronic)	Please do not go forward with your plans to conduct training exercises all along the U.S. East Coast <http://aftteis.com/GetInvolved/OnlineCommentForm.aspx> and in the rich marine environment off the coast of California and Hawaii	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	<http://hstteis.com/GetInvolved/OnlineCommentForm.aspx> which would involve the use of live explosives and high-intensity sonar. Your estimates are that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. That is devastating and irresponsible and something I find shocking that America would do. We need to stand tall and create an example for other countries. Please find an alternative for your tests. One that won't destroy life, precious resources and our oceans!	analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Weiand (Electronic)	Don't harm the dolphins and their hearing. I know from personal experience to have a severe hearing loss. It is terrible and you are not able to relate to the real world. The dolphins are almost human like and need to relate to their world. Hearing is essential. Every day I want to die, because I can no longer hear. Every day is a torment to exist. By the way, I am a Navy brat. My father retired with the rank of Admiral. Please "hear" my voice and no harm to the dolphins.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Weiner-01 (Electronic)	Sonic testing in the ocean is dangerous to our life in the ocean. You need to re-think this and stop the testing, stop maiming and injuring our aquatic mammals plus so many other life forms in the ocean that whose morbidity and mortality are increased directly due to this poorly thought out testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Weiner-02	Please stop using my tax payer money to fund these deplorably destructive and dangerous tests. Our neighbors, aquatic mammals and other species, are part of life on this planet and infliction of morbidity and mortality is deplorable and needs to stop now. Figure something else out that isnt so harmful to other life forms with whom we share our planet.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Weinfurter-01 (Electronic)	Please refrain from using explosives and sonar near Hawaii and Southern Caifornia. The damage to the whales and dolphins in the area and for miles around would be catastrophIc. It would be the equivalent of blowing an airhorn within 10 ft of your head. Save the whales & dolphins!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Weinfurter-02	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Weinfurter-03	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Weinstein (Electronic)	I agree that we need a robust and strong Navy to protect national security. I also agree that whales, dolphins, and porpoises deserve to live and to have a healthy ocean environment. According to its own Environmental Impact Statements, the Navy estimates that the training exercises planned along the East Coast and in the rich marine environment off the coast of California and Hawaii involving live explosives and high-intensity sonar would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. I understand the need for protecting our country, but we can find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. In the past, whales have stranded and died in the wake of major military sonar exercises, with bleeding from the ears and other tissue damage attributed to sonar. These have included incidents of beaked whales dying in the Canary Islands following sonar exercises, the panicked flight of orcas and porpoises off Washington State in 2003, and dozens of whales (including pregnant females) from several species who died in North Carolina in 2005. These tragedies can be avoided to a very significant degree. I urge the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger "safety zone" around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Weiss (Electronic)	There is already soooo much working against our environment on which we depend. Please do not add to the problems! It's crucial for everyone to keep things in balance.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Weller (Electronic)	I grew up in the Norfolk, VA area where the Navy is a vital and respected part of the fabric of the community. I have also had the privilege of visiting the California coast and the enchanting Hawaiian Islands. In Hawaii, I was able to watch gray whales and their calves frolic and breach in their natural environment. The sea is critical to the U.S. Navy and our national security and is also critical to the very survival of the dolphins and whales that must share it with our ships. I implore the Navy to find ways to lessen the impact on these amazing animals that already face survival challenges from so many man-made objects (i.e. trash, etc.) Surely there are intelligent scientists/biologists that can help our officers at the Pentagon come up with a strategy to fulfill the Navy's mission AND protect our sea life. To do anything less would be an abdication of responsibility as U.S. citizens and as caretakers of our fellow creatures. Thank you for the opportunity to comment.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wells (Electronic)	Hello, Please find a way to ensure national security without sacrificing such an extraordinary number of whales, dolphins, and many other marine creatures. According to its own Environmental Impact Statements, the Navy estimates that the planned exercises would kill up to 2,000 marine mammals, including a large number of animals from endangered species, such as right whales. Thousands of others would suffer permanent lung damage. An additional 16,000 would be permanently deafened and 5 million would be temporarily deafened by the exercises. Please consider steps to reduce the harmful impacts to marine mammals. These steps could include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	porpoises might be harmed or killed. Thank you for your consideration.	activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate.
Wesch (Electronic)	Please do not allow the taking of any marine mammals. Whales are intelligent mammals with complex social structures. Improved sighting methods need to be employed as whales often travel silently. Relying on the current sighting guidelines is inadequate. Sonar use needs to be restricted in every way possible: time allowed, strength, frequency . . . Use simulation methods for training and restrict open ocean testing.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
White-01 (Electronic)	I am appalled at the inevitable repercussions of this project. Applying sonar in areas known to be populated by marine mammals such as whales, who depend on sonar to survive is outrageous. We need to ensure the health of these creatures, and in effect of our oceans. The US Navy has the obligation to protect our country from harm--would that it does not harm our country in the process. This proposal seeks to gain the Navy the right to wreak destruction in our ocean--right off of our very coast. This is unacceptable. Those with direct power in this decision-making process have an absolute duty to look for less destructive alternatives to this project, and to deny this project completely as it is. We cannot afford to folly about with the health of something so vital as our ocean ecosystem. Regardless of how much we have sought to separate ourselves from nature, we are still very much dependent on it.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
White-02	I hope the fishermen are getting a word in about this, because their dependence is so direct and immediate. Please fulfill your duty to our country by rejecting this proposal.	Many Navy at-sea training and testing ranges are accessible to the public for recreational and commercial purposes. The Navy acknowledges that during specific exercises, its training and testing could briefly limit public access (usually lasting hours) to a very limited portion of coastal and ocean areas to ensure public safety. The Navy has conducted training in these operating areas regularly for approximately 60 years. Though the intensity of live training will increase, the events are of relatively short duration and therefore the Navy does not anticipate that fish will be affected as a result of the training exercises and testing activities. Fish may respond behaviorally to sound sources in their hearing range (most Navy sound sources are not in the hearing range for most fish species), but this reaction is only expected to be brief and not biologically significant. Most commercially important fish species are not believed to hear midand high-frequency sound sources which make up the majority of sound producing activities.
Whiteman-01 (Electronic)	Today is the last day that I can submit my comments regarding the US Navy's intent to conduct sonar testing and oceanic bombing in the South Pacific. I am adamantly against this because it will severely harm marine mammals. The arrogance of us as human beings to believe that it is acceptable is misguided and plain wrong. I implore those that have the Power and the conscience to stop this effort in its tracks. Proceeding In this project will be devastating to the thousands, if not, hundreds of thousands of marine animals. It is devastating to my heart to think this could really happen. For what? The sake of knowledge, study, practice or national security. What more can we	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Whiteman-02	Destroy that we have not tainted already. Perhaps my reasoning is naive, but I see no concrete purpose or good in these activities. I add my concerns, discontent, and	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	disapproval of these activities to the list of ocean-loving, animal-friendly, and eco-conscious people that you stop this effort now. Thank you.	
Whittaker (Electronic)	The Navy's planned exercise along both coasts of the US., cannot take so many thousands of marine animals lives. In good conscience, it is wrong. With all the technology available, something else needs to be done. Right now, what the Navy plans is unacceptable. AW	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. See the FEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Historically the Navy has recorded of few to no mortalities from sonar and explosives. Any model used to predict impact is only an estimate. Sonar is the best means of locating small objects in the water. The Navy is constantly evaluating and funding research to assess improved technologies that will achieve Navy mission goals while protecting resources on land and at sea. Evaluation of these technologies continues to be a Navy focus as is research into all technologies that will protect and defend the United States.
Wicks (Electronic)	It is my considered opinion that our oceans/sea life are under considerable "attack" from everything and would very much like to see the military services, etc. do everything they can to avoid causing more trauma to ocean/sea life of all types. thank you for your consideration !	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wilkerson (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. Thank you for your time, The Wilkerson family	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
R. Williams (Electronic)	As a conserned citizen of the united states. It is extremely disturbing to me that you do EIS testing. Are you aware of the harm that causes whales and dolphins. Please do not harm these wonderful animals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Tracy Williams-01 (Electronic)	Please find an alternate method for testing that does damage the ecosystem or kill and disrupt the lives of dolphins, whales and other marine life. Such collateral damage is not acceptable to anyonea and should not be to our military who we support unconditionally. Thank you!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Tracy Williams-02	The navy's blatant disregard for Sea mammals is Shameful. You make the U.S. look like a backward nation. Your lack of intelligence when it comes to aquatic species is mind boggling. I am ashamed to be an American nowdays. I understand why the world hates the US where once it was loved. I am saving my money to leave this BS Lie. Land of greed, land of idols and whores. YOU ARE KILLING WHAT IS LEFT OF THE SEAS! Moronic. Go for it. You will be held accountable. There is a G_d.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Trinidad Williams (Electronic)	I had commented on a Hawaii group blog that dismissed an EIS reporting meet; had previously signed a petition titled "... don't deafen the whales" ~ my interest generated by a news item of impending Naval Armada to conduct sonar research in Hawaiian waters' which I'd felt disturbing to the whales currently in the island channels raising young calves-possibly mating-feeding before traveling back to the West coastal waters. I am so pleased to find a link that has extensive research reports; I have a better understanding of purpose-have information to the ecological conditions-diverse lifeforms-marinelife protection measures. I am submitting comment of thank you for this available link to questions that I feel is an issue.	Thank you for participating in the NEPA process.
Williamson (Electronic)	The science is clear that the sonar equipment is harmful to whales and marine life. Don't use it and destroy many of the precious marine lives we are trying to preserve. For training it's unacceptable. I am sure there are alternative ways to stimulate the experience without causing death and destruction. As a health care provider we don't kill people and revive them to practice our skills! If we destroy our planet's diversity, air and water for security purposes we will have accomplished NOTHING.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
A. Wilson (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing. Most sincerely, Amanda Wilson	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
David Wilson (Oral-Hilo)	My name is David Wilson. Is this loud enough? Is that loud enough? Okay. I'm kind of paranoid because -- well, just because of the situation in the world now. I'm just going to say one thing first. Do we know that every 80 minutes, an American vet commits suicide? Now, these wars -- they can talk about the whales, the turtles, okay. But they're not going to just say, "Oh, we didn't know that. Thank you. We'll stop this now." Everything else goes on, but the turtles and the whales are safe? It's just part of the whole -- I'm just saying like we had this sign out there, the legality has replaced morality. You will not -- you will not tell me (inaudible). Anyway, when I think about the military, I'm sad. My dad was a career Air Force guy, World War II and Korea. He retired as a	Thank you for participating in the NEPA process.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	(inaudible) major. But I wanted to go to West Point as a kid, but I wasn't smart enough of course. So I know all this strategy. My dad taught me all these strategy ideas and all this stuff, and I realize how the military is being used. We think the American military is doing whatever they're ordered. We're all under orders, right? All the way back to who's in charge of the whole thing, we don't know their names. We're only being used basically to -- one of the things is to depopulate the Muslim world and at the same time kill and maim thousands and thousands of American troops and, you know, people get the post-traumatic syndrome and all this stuff like that. So I'm just saying the military is not to blame. They're being used, and it's just sad because we cannot get back to the core by talking to a few. (Inaudible) ask what your rank is? You're a captain. Okay. Captain, well, you have a lot of responsibility. But I mean even so, I don't even think you're going to say, "Oh, we didn't know that. We'll change it." So I'm just saying whatever. I don't know what I'm saying. It's just depressing to me to be in this position. Anyway, the idea that until we've seen the thing, by next winter, 10 to 20 million tons -- 10 to 20 million tons of debris is going to hit the Kona Coast. What are you going to do then? And it's in the air now. There's radiation in the milk in Pennsylvania, in Iowa, the West Coast. I mean this is what's happening, and you can't fight it. You can't shoot it down. You can't sonar it away. And in 30 seconds, I'll just say let's all rely on the Lord. That's what we've got to do because otherwise we (inaudible). Otherwise, what are you going to do? Fix it? Sonar ain't going to fix it. God bless you. AUDIENCE MEMBER: Thank you, David. The problem isn't that you weren't smart enough. You just wouldn't be brainwashed. You were too smart.	
Denise Wilson (Electronic)	The HSUS is joining other environmental and animal welfare groups to ask the Navy to consider steps to reduce the harmful impacts to marine mammals. These steps include avoiding the most harmful activities in areas used as calving grounds or migratory corridors; avoiding seasonal high-use feeding areas; creating a larger “safety zone” around the exercises; and using aerial or acoustic monitoring to determine whether marine mammals are nearby and may be harmed. Taking these steps would allow important military training exercises to go forward, while minimizing the likelihood that whales, dolphins, and porpoises might be harmed or killed. Along with the HSUS, I am calling on the U.S. Navy to re-think its plans and to incorporate additional protective measures. Mrs. Denise Wilson	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Donna Wilson (Electronic)	Please don't close your eyes to this. There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
J. Wilson (Electronic)	There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Z. Wilson (Electronic)	Please limit Navy sound testing! There is much we don't know about whales but we do know they are highly intelligent, social, highly evolved mammals. We know their brains have as much or more surface area than ours which suggests their intelligence may parallel ours though it may be a very different kind of intelligence. Many marine mammal species are endangered because of human impacts upon their environment or hunting. Some whale populations which were in the past endangered are just beginning to return because of education and protection. We have no right to knowingly permanently injure these living creatures who never purposefully injure humans unless first provoked. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. Unless the rights of these marine mammals are respected, I cannot condone Navy sound testing.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wiltse (Electronic)	Please stop training and testing EIS/OEIS.it does terrible damage to wildlife.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Winterbottom (Electronic)	We are saddened to hear that the Navy is considering conducting exercises involving the use of live explosives and high-intensity sonar. Do you feel that it is really necessary to conduct this testing that will affect such a volume of marine life? It would be a great pity to see so much of the conservation work the USA has undertaken towards its marine environment over the last number of years being undermined by these proposed exercises. These conservation initiatives deserve to be applauded and have made the USA one of the leaders in marine conservation. To conduct these exercises flies in the face of all the good work and progress that has been achieved to date. There is also the issue of sound channels in the oceans that can carry sounds over vast distances, so not only local populations may be affected but also populations in areas seemingly far	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	removed from the testing activities. As these activities could potentially affect endangered species on both the high seas and possibly in the territorial waters of other nations we believe that any other nations that could potentially be affected should be fully consulted, and the findings of any such consultations made public, prior to any decision being made on whether these activities should progress to the next stage. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations.	activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wiseman (Electronic)	PLEASE rework this plan to provide better protection for marine mammals! The current plan is predicted to cause deafness, stranding, and death to thousands of animals. I appreciate military protection, but not at the cost of killing any innocent animals just for training; please do not carry on exercises that would cause marine mammals to suffer and die. Instead, consider and adopt alternative suggestions that animal welfare organizations can recommend, and consider exercises that don't require the actual deployment of explosives and high intensity sonar that cause so much suffering. Thank you.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.
Wolf (Electronic)	Please, we must stop this training and testing. We are at risk of endangering many marine animals. With all of the knowledge we have there has to be a better way for testing. please stop.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Woo (Electronic)	I do not condone Navy sound testing which will negatively impact marine mammals.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
K. Wood (Electronic)	Please do not continue or support the U.S. Navy's training activities in waters off the Pacific Coast. The Navy has admitted that the sonar tests will cause harm to whales and dolphins ranging from discomfort to disorientation to permanent deafness which would interfere with navigation, self defense and finding food thereby seriously impairing their ability to survive. Increased beaching and deaths of marine mammals have certainly	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	been linked to previous Navy sound testing. Unless it is a time of war with imminent threat these tests should not be performed in areas known to be frequently passaged by whales and dolphins or within effective range of whales and dolphins. Please limit Navy sound testing to areas outside the known paths of migration, reproduction and feeding of whales and dolphins and other effected marine mammals. Please also require scanning for the presence of marine mammals within the disturbance zone prior to testing and delay testing until the marine mammals depart from the affected area. We are meant to be stewards of the earth, yet everywhere we here of inhumane treatment of the fellow creatures with which we share this beautiful planet. I want the U.S. Navy to protect all of life and not disregard the harm done to whales and dolphins in the name of human security. Protecting all of life enhances all of our security. THANK YOU!	(Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
M. Wood (Electronic)	The navy is a very important part of our country and I support the men and women who serve in our navy. They have bravely fought on behalf of the United States in wars that most of us might not agree with, yet they have pledged to protect and serve against all cost. So I am outraged that the navy would put our ocean mammals at risk. We must protect them as well as our people. Please do not move forward with implementing this harmful technology. Remember what you stand for and your pledge to protect innocent lives.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Woodward (Electronic)	Stop. Stop stop stop. THINK. Explosives and sonar testing? Really? COME ON. We would ask you to give serious consideration to just how necessary these proposed exercises are and where the benefits of them lie versus the destruction of marine life that so many dedicated citizens have worked tirelessly to preserve and enhance for both current and future generations. Susan Woodward	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Woolley-01 (Electronic)	PLEASE CONDUCT YOUR EXPERIMENTS AWAY FROM ALL MAMMALS SO THEY ARE NOT AFFECTED BY THE LOUD NOISES AND EXPOSIVES...IT SURELY CAN BE DONE SOMEWHERE AWAY FROM ALL MAMMALS...WE DON'T NEED ANY OF THESE SPECIES TO BE ENDANGERED OR WORSE...THERE IS ALWAYS A BETTER OR OTHER CHOICES... THANK YOU... C.WOOLLEY	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Woolley-02	PLEASE RECONSIDER WHERE YOU WILL CONDUCT YOUR EERCISES SO THEY WILL NOT AFFECT THESE MAMMALS...IT SHOULD NOT BE NECESSARY TO DISTURB OR HARM THESE MAMMALS...THERE ARE ALTERNATIVE WAYS...PLEASE CHOICE AN ALTERNATIVE...THANK YOU.. COLETTE WOOLLEY	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wright (Electronic)	Please consider how important the balance of the Ocean Environment is to our lives. These amazing intelligent mammals deserved not to be harmed	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Wyse (Electronic)	Plenty of people are already stating well thought out reasons why this is a poor choice. Let's be frank - stop it. Marauding all over the planet destroying cultures and species that can never be replaced is poor behaviour. We were all taught this as children. Please stop.	A Cultural resources analysis appears in Section 3.10 (Cultural Resources) of the EIS/OEIS which addresses cultural artifacts and shipwrecks. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf]. Regarding the use of simulation, as described in Section 2.5.1.4.1 (Simulated Training) of the Draft EIS/OEIS, “Today’s simulation technology does not permit anti-submarine warfare training with the degree of fidelity required to maintain proficiency. While simulators are

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		used for the basic training of sonar technicians, they are of limited utility beyond basic training. A simulator cannot match the dynamic nature of the environment, such as bathymetry and sound propagation properties, or the training activities involving several units with multiple crews interacting in a variety of acoustic environments."
Xander (Electronic)	I am greatly concerned about the horrific impact of the mass use of sonar, sonar testing, and the auditory effects of explosions in waters which contain wildlife dependent upon hearing for navigation, calving, feeding, social interaction and development, and their entire existence. These mammals are highly intelligent; massive sonar blasts that inflict immense pain, disability and death are cruel, and will have a profoundly negative impact on entire social pod structures throughout the waters where this is used. If we, as a nation and military, are to use such methods in our arsenal, there MUST be safeguards in place to minimize negative impacts, and to protect the wildlife in the waters where we operate. Anything less is an exercise in animal cruelty and negligence unparalleled in human maritime existence. There is proof that intense mechanical sonar blasts can rupture the eardrums and cause life-threatening damage to dolphins and whales -- this is not only a fatal impact, but one which is extremely painful, causing these animals to die in agony. I believe there is no excuse whatsoever for the mass slaughter of our marine mammals on such an unimaginable scale, should this technology's use be widened and exercised with impunity throughout our national and international waters. Thank you for your consideration.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Yager Delagrang (Electronic)	Please do not kill marine life because of the explosive testing planned off the coasts of California and Hawaii.	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities.
Youngs (Electronic)	Please Protect these mammals	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Yuen (Written)	Excellent presentation! Keep up the good work. Communicating with the public is where it is all at. Really surprised to see officers from Kauai at the function.	Thank you for participating in the NEPA process.
Yushin (Electronic)	Karma and compassion are universal concepts. Treat others as you'd like to be treated. We urge you to cease military action that would kill and disfigure life in the ocean and elsewhere. Sincerely, P. Yushin Honolulu, HI	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Zehel-01 (Electronic)	I am outraged that the U.S. Navy would go ahead with sonar testing that could kill and harm marine mammals 2.8 million times a year over a five year period. The proposed training and testing activities off the coasts of Hawaii, Southern California, the Atlantic seaboard and the Gulf States from 2014 to 2019 gives these figures in your Draft	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
	Environmental Impact Statements. The Navy's projected damage to whales and dolphins is astounding. It is a vast increase over previous estimates of potential harm for the same regions. The numbers for far-reaching harm that will be inflicted on marine mammals during these testing activities is staggering: over 5,000,000 instances of temporary hearing loss, 16,000 instances of permanent hearing loss, almost 9,000 lung injuries, and over 1,800 deaths. An estimated 11,200 whales and dolphins will be deafened. What is unstated is that whales and dolphins depend on sound to navigate, communicate and survive. What is not presented in your analysis are reasonable alternatives to reduce the unprecedented damage to marine animals.	Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Zehel-02	Your mitigation plan, based on the ability of lookouts to detect whales and dolphins, will not achieve a significant reduction in damage to marine life.These same plans have been found by Federal courts to be inadequate and ineffective. Visual surveillance may be impaired at sea and unsuitable for distinguishing deep-diving species that spend little time at the surface. If fully effective, it would only protect species from the most serious injuries. I call on the Navy to please identify and set aside areas of high marine mammal density which is acknowledged to be the most effective means of reducing marine mammal injury. If the United States and its Navy wish to be seen as a leader in saving marine life, it must significantly reduce the levels of death and injury to whales, dolphins and other marine life involved in these plans. Thank you for the opportunity to comment. I hope to hear this testing is stopped since the damage to our oceans would be horrific.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
Zelkovsky (Electronic)	Why is the ocean constantly being treated like some non-living non life supporting entity? Just because it is so large and pervasive and because human mistakes seem to disappear over time does not mean that the ocean is unaffected. The ocean supports life and food for people but somehow it is treated like a third class citizen. Recently on Kauai there was an electrical short in a sewage treatment plant. So automatically the partially treated sewage was dumped into the ocean, using it like a cesspool. I say no to using the ocean for any kind of testing.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
Zorn (Electronic)	Please, just reconsider. Have we not done enough to harm our one frontier that is essential to the human race's continued preservation? Continuing efforts that harm more species is hardly moving forward, and for what cost? The cost is immeasurable, and potentially, irreversible. Please, just reconsider.	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Zuckert (Electronic)	I am opposed to Alternative 2. Any expansion of training would be detrimental to marine mammals and sea turtles. The Navy has adequate ocean area for training already and should not increase its footprint of disruption of natural processes and sea life. The EIS states the negative and unacceptable impacts quite succinctly: The aggregate impacts of past, present, and other reasonably foreseeable future actions are expected to result in significant impacts on marine mammal and sea turtle species.	The Alternatives carried forward meet the Navy's purpose and need to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent practicable, mitigation measures during its training and testing activities. Based on the analysis in the EIS/OEIS and monitoring conducted during actual training events, the proposed training will not pose a risk to whales, fish, and other wildlife given that these same activities have been conducted for many years here and in other Range Complexes with no indications of broad-scale impacts that are either injurious or of significant biological impact to marine mammals, fish, or wildlife at those locations. Please see the recent results supporting this as presented in training ranges monitoring reports available at available at: [http://www.nmfs.noaa.gov/pr/pdfs/permits/hrc_socal_report.pdf].
Zullo (Electronic)	I am astounded at the lack of reguard for our marine wildlife by the Navy, yet another example of "Do what I say, not what I do" by a United States Government organization. What is the difference between those Japanese vessels killing and hauling mother whales and this, NOTHING....thats what!!!!! As a former U.S. Marine and loyal U.S Citizen that is decorated in defending this county, I am ashamed of our Navy and Governemnt, and it gets harder every day to call myself a proud American. Where are the environmentalist and other watchdog organizations that need to step up and protect us from our government.... HELP US HELP OURSELVES!	The Navy shares your concern for marine life. The analysis and the science show that there is not a significant impact on marine species. All of the potential effects from Navy training and testing activities were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS/OEIS. Also, as described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy implements the most practical mitigation measures with the aim of achieving the least practicable adverse impacts to marine mammal species or stocks, to the maximum extent

Table E.3-4: Responses to Comments from Private Individuals (continued)

Commenter	Comment	Navy Response
		practicable, mitigation measures during its training and testing activities.
Name Withheld by Request (Written)	Unless we are Hawaiians, we are visitors to Hawaii. Visitors have an obligation to their hosts. I don't believe that the Navy has satisfied their obligations as visitors to our island. Just as the rule in a hostel is, a visitor who leaves a place better than they found it. Action needs to be taken to clean up the supersite, the mess made by the military. By Hawaiian custom, lands belong to the people who care for them. Since the Navy has not in the past taken care of the seas, taken care of their harbors, taken care of our skies. Between munitions dumped, decaying housing, pollution in the harbors and on the lands and skies (from exhaust from airplanes), the Navy has no right to any lands here.	Thank you for participating in the NEPA process.

E.3.1 FORM LETTER

The Navy received a CD from the Natural Resources Defense Council containing approximately 76,000 versions of a letter from their members. Table E.3-5 provides the Navy's responses to the comments in the letter. Table E.3-6 provides the Navy's response to amendments to the basic letter. Responses to these comments were prepared and reviewed for scientific and technical accuracy and completeness.

Table E.3-5: Responses to Comments in the Form Letter from the Natural Resources Defense Council

Commenter	Comment	Navy Response
Natural Resources Defense Council (Form Letter)-01	Your analysis fails to present and analyze reasonable alternatives that would significantly reduce the unprecedented level of harm to marine life.	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4, Purpose and Need for Proposed Military Readiness Training and Testing Activities) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, and comments received via the EIS/OEIS public participation process.
NRDC (Form Letter)-02	The mitigation scheme that the Navy principally relies on centered on the ability of lookouts to detect whales and dolphins will not result in an appreciable decrease in marine mammal injuries. Federal courts have found this same scheme inadequate and ineffective for good reason: it is largely useless in conditions (common at sea) that impair visual surveillance, it is unsuitable for detecting cryptic and deep-diving species that spend little time at the surface, and, even if it were fully effective at detecting whales and dolphins, would only protect species form the most serious injuries.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note

		are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.
NRDC (Form Letter)-03	I call on the Navy to identify and set aside areas of high marine mammal density acknowledged to be the most effective means of reducing marine mammal injury.	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of numerous potential mitigation measures. Section 5.3.1.2.4.1 (Detection Probabilities of Marine Mammals in the Study Area) has a detailed discussion of available literature on the sightability of marine mammals. Note that Navy does not employ only visual monitoring and makes use of passive acoustic detection when available and appropriate. Also note that not all beaked whale species are small and for example, Baird's beaked whale can reach in excess of 40 feet in length and generally have a detection rate g(0) in excess of 0.90 in the Pacific. More importantly, however, the characterization that visual detection rates for marine mammals, "generally approach only 5" is not accurate. Specifically in reference to the citation in the comment, Barlow and Gisiner (2006) provide a description of typical marine mammal survey methods from ship and aircraft and then provide "a crude estimate" of the difference in detection of beaked whales between trained marine mammal observers and seismic survey mitigation, which is not informative with regard to Navy mitigation procedures for the following reasons. The authors note that seismic survey differs from marine mammal surveys in that, "(1) seismic

		surveys are also conducted at night; (2) seismic surveys are not limited to calm sea conditions; (3) mitigation observers are primarily searching with unaided eyes and 7x binoculars; and (4) typically only one or possibly two observers are searching." When the Navy implements mitigation for which adjustments to modeling output were made, the four conditions Barlow and Gisiner (2006) note are not representative of Navy procedures nor necessarily a difference in marine mammal line-transect survey procedures. The Navy accounts for reduced visibility (i.e., activities which occur at night, etc.) by assigning a lower value to the mitigation effectiveness factor. On Navy ships, hand-held binoculars are always available and pedestal mounted binoculars, very similar to those used in marine mammal surveys, are generally available to Navy Lookouts on board vessels over 60'. Also like marine mammal observers, Navy Lookouts are trained to use a methodical combination of unaided eye and optics as they search the surface around a vessel. The implication that marine mammal surveys only occur in "calm sea conditions" is not accurate since the vast majority of marine mammal surveys occur and data is collected in conditions up to sea states of Beaufort 5. The specific g(0) values analyzed by Barlow and Gisiner (2006) were derived from survey data for Cuvier's and Mesoplodon beaked whale that were detected in sea states of Beaufort 0-2 during daylight hours. However, marine mammal surveys are not restricted to sea states of Beaufort 0-2, many species g(0) values are based on conditions up to and including Beaufort 5 and, therefore, the conclusions reached by Barlow and Gisiner (2006) regarding the effect of sea state conditions on sightability do not apply to other species. Finally, when Lookouts are present, there are always more than the "one or two personnel" described by Barlow and Gisiner (2006) observing the area ahead of a Navy vessel (additional bridge watch personnel are also observing the water around the vessel). Finally, Navy's reliance on visual mitigation has been demonstrated to be effective over the seven years of monitoring associated with Navy training and testing at sea in publically available reports submitted to NMFS since 2006 and accessible on the NMFS Office of Protected Resources website.

Individuals who submitted the form letter made their own amendments, additions, changes, and editorial remarks. Most expressed general opposition to the Proposed Action; others were related to the topics described below. The Navy has responded to these additional comments in Table E.3-6.

Table E.3-6: Responses to the Additions and Changes to the Form Letter as Submitted by the Natural Resources Defense Council

Comment Topic	Response
Concern for harm to marine mammals/marine life	The Navy is committed to protecting the marine environment during the conduct of its training and testing activities. As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the EIS/OEIS, the Navy has used extensive measures to protect the marine environment while training and testing for nearly a decade.
Requests or suggestions for different alternatives	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4, Purpose and Need for Proposed Military Readiness Training and Testing Activities) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives. The Navy complied with NEPA requirements in the development and consideration of alternatives. This EIS/OEIS analyzes all alternatives in Section 2.5.2 (Alternatives Carried Forward) and explains why the Navy has eliminated other alternatives in Section 2.5.1 (Alternatives Eliminated from Further Consideration). The selection of an alternative by the decision-maker will be based on a review of all relevant facts, impact analyses, and comments received via the EIS/OEIS public participation process.
Requests or suggestions for additional or other mitigation	As described in Chapter 5 (Standard Operating Procedures, Mitigation, and Monitoring) of the Final EIS/OEIS, the Navy evaluated the effectiveness and practicability of a number of potential mitigation measures. The Navy, in conjunction with NMFS, has determined what mitigation it can effectively use during its training and testing activities. Through careful exploration of all mitigation measures to determine which were the most effective (see Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring]), the Navy has chosen the existing measures to mitigate harm to marine mammals while still being able to meet its operational needs to train for real-world conditions.
General misunderstanding for the need for the Proposed Action	The Alternatives carried forward meet the Navy's purpose and need (see Section 1.4, Purpose and Need for Proposed Military Readiness Training and Testing Activities) to ensure that it can fulfill its obligation under Title 10. See Section 2.5 (Alternatives Development) for more detailed information on the development of alternatives.

E.3.2 PETITION

The Navy received a petition circulated by MoveOn.org containing approximately 477,000 signatures. Table E.3-7 provides the Navy's response to the petition itself. The response to the petition was prepared and reviewed for scientific and technical accuracy and completeness. Individuals who signed the petition added their own remarks. Most expressed general opposition to the Proposed Action; other additions were similar to the topics described above for the Natural Resources Defense Council form letter (see Table E.3-6).

Table E.3-7: Response to the Petition from MoveOn.Org

Comment	Navy Response
Stop the killing of 1,800 whales and dolphins and the deafening of 15,900 more by ceasing the operation of the Navy's underwater sound system in the Hawaiian Islands, the California and Atlantic Coasts, and the Gulf of Mexico.	Below is a summary of the facts and analyses related to the HSTT EIS/OEIS: • The Navy employs extensive mitigation measures during its training and testing activities, which the Navy believes significantly, minimizes the risk to marine mammals. • During several decades of training and testing with explosives, only four marine mammals are known to have died during one training accident. Following this incident and in accordance with standard operating procedures, the Navy has ceased all similar training, reviewed mitigation measures, worked with regulators, and have revised Navy mitigation measures. • There is evidence of fewer than 40 marine mammal stranding deaths worldwide connected to Navy sonar training, and no such incidents have occurred since 2006. By comparison, along the coasts of the continental United States, Alaska, and the U.S. Pacific Islands (including Hawaii) over a 9-year period (2001-2009), there were a total of 51,649 reported marine mammal strandings (12,545 cetaceans [average 1,394 per year] and 39,104 pinnipeds [average 4,345 per year]). There has never been a recorded marine mammal stranding in which Navy training or testing using sonar was a causal factor along the East Coast, West Coast, Gulf of Mexico, or Hawaii. • The Navy's modeling, which does not account for mitigation efforts, estimates there is a possibility marine mammals may be exposed to sound levels in certain frequencies that could result in a loss of hearing sensitivity. Using the mitigation measures, we expect the actual numbers of marine mammals affected by Navy training and testing to be much lower. See the Final EIS/OEIS for the refined analysis (refined in coordination with NMFS). The revised estimates now account for mitigation and avoidance, to provide a more holistic approach to analysis. Additionally, loss of hearing sensitivity at certain frequencies does not mean marine mammals will become deaf—they will still be able to hear, hunt for food, and perform other normal activities.

E.4 FINAL ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT

The public has the opportunity to review the Navy's responses to their comments in this Final EIS/OEIS. All public comments are considered by the decision-maker prior to making a decision.

E.5 NATIONAL MARINE FISHERIES SERVICE PROPOSED RULE

As part of the HSTT EIS/OEIS process, in accordance with the Marine Mammal Protection Act (MMPA), the Navy requested a Letter of Authorization from the National Marine Fisheries Service (NMFS) for the incidental taking of marine mammals during the conduct of training and testing activities in the HSTT Study Area. On 31 January 2013, the MMPA Proposed Rule was published in the Federal Register by NMFS for public comment.

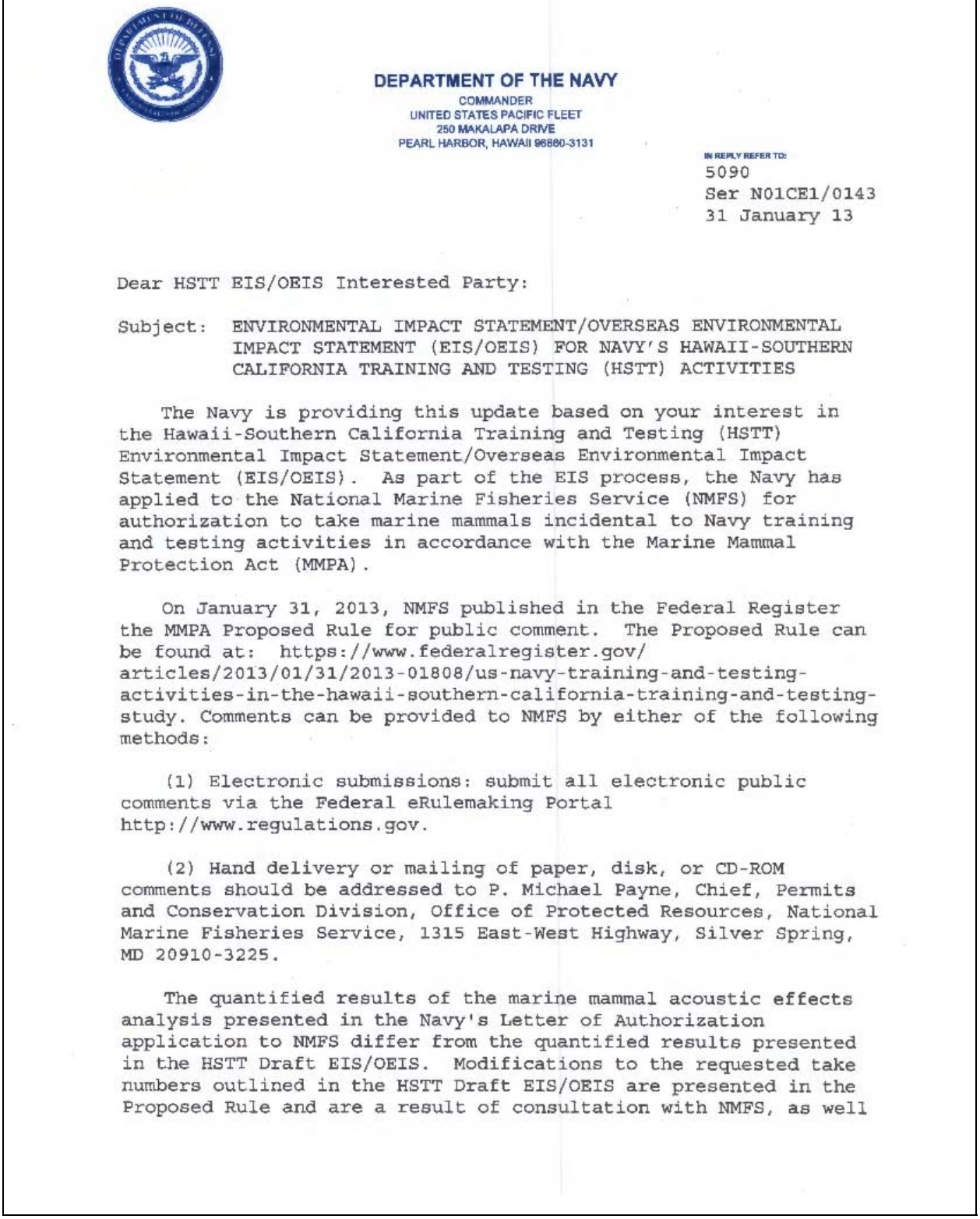
After the release of the Draft HSTT EIS/OEIS on May 11, 2012, adjustments were made to the quantified results of the marine mammal acoustic effects analysis and changes were made to the requested take numbers. Adjustments to the requested take numbers in the Draft HSTT EIS/OEIS were presented in the Navy's Letter of Authorization application and reflected in the Proposed Rule. These adjustments were a result of administrative corrections to the modeling inputs for training and testing and the use of more accurate seasonal density for the species (short-beaked common dolphins) having the highest abundance of any marine mammal in the study area. These changes are now reflected in the Final HSTT EIS/OEIS. In consultation with NMFS, the Navy made these post-model adjustments to further refine the numerical analysis of acoustic effects by considering animal avoidance of sound sources, avoidance of areas of activity before use of a sound source or explosive, and implementation of mitigation. Section 3.4.3.1.7 (Marine Mammal Avoidance of Sound Exposures) and Section 3.4.3.1.8 (Implementing Mitigation to Reduce Sound Exposures) of the HSTT Final EIS/OEIS describe in detail the post-model adjustments made to further refine the numerical analysis of acoustic effects.

E.5.1 NOTIFICATION OF THE NATIONAL MARINE FISHERIES SERVICE PROPOSED RULE

Because of changes made after the Draft HSTT EIS/OEIS, the Navy provided the public with the opportunity to review and comment on the changes before the issuance of the Final HSTT EIS/OEIS. The Navy sent out letters to stakeholders (Figure E.5-1) and e-mails to interested parties (Figure E.5-2); in addition, the Navy posted a link to the Proposed Rule on the public web site (www.HSTTEIS.com). The Navy advised NMFS and the public that all comments received on the Proposed Rule that addressed the (1) changes to the tempo or location of certain proposed activities, (2) refinement to the modeling inputs for training and testing, and (3) additional post-model analysis of acoustic effects and implementation of mitigation would be considered and addressed by the Navy in the Final HSTT EIS/OEIS.

E.5.2 COMMENTS AND RESPONSES TO THE PROPOSED RULE

Table E.5-1 provides a listing of comments received on the NMFS Proposed Rule and the Navy's responses relative to the adjustments that were made after the Draft HSTT EIS/OEIS was released to the public. Responses to these comments were prepared and reviewed by appropriate subject matter experts for scientific and technical accuracy and completeness. Comments appear as they were submitted and have not been altered. Table E.5-1 contains comments from the Marine Mammal Commission (a federal organization) and Natural Resources Defense Council (a non-governmental organization) that were received during the public comment period on the Proposed Rule.



DEPARTMENT OF THE NAVY
COMMANDER
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-3131

IN REPLY REFER TO:
5090
Ser N01CE1/0143
31 January 13

Dear HSTT EIS/OEIS Interested Party:

Subject: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY'S HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) ACTIVITIES

The Navy is providing this update based on your interest in the Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). As part of the EIS process, the Navy has applied to the National Marine Fisheries Service (NMFS) for authorization to take marine mammals incidental to Navy training and testing activities in accordance with the Marine Mammal Protection Act (MMPA).

On January 31, 2013, NMFS published in the Federal Register the MMPA Proposed Rule for public comment. The Proposed Rule can be found at: https://www.federalregister.gov/articles/2013/01/31/2013-01808/us-navy-training-and-testing-activities-in-the-hawaii-southern-california-training-and-testing-study. Comments can be provided to NMFS by either of the following methods:

(1) Electronic submissions: submit all electronic public comments via the Federal eRulemaking Portal http://www.regulations.gov.

(2) Hand delivery or mailing of paper, disk, or CD-ROM comments should be addressed to P. Michael Payne, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3225.

The quantified results of the marine mammal acoustic effects analysis presented in the Navy's Letter of Authorization application to NMFS differ from the quantified results presented in the HSTT Draft EIS/OEIS. Modifications to the requested take numbers outlined in the HSTT Draft EIS/OEIS are presented in the Proposed Rule and are a result of consultation with NMFS, as well

Figure E.5-1: Letter Notification of the National Marine Fisheries Service Proposed Rule

Subject: ENVIRONMENTAL IMPACT STATEMENT/OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS) FOR NAVY'S HAWAII-SOUTHERN CALIFORNIA TRAINING AND TESTING (HSTT) ACTIVITIES

as administrative corrections to the modeling inputs for training and testing and the use of a more accurate seasonal density for the species (short-beaked common dolphins) having the highest abundance of any marine mammal in the Study Area.

In consultation with NMFS, the Navy has made post-model adjustments to further refine the numerical analysis of acoustic effects to include animal avoidance of sound sources, avoidance of areas of activity before use of a sound source or explosive, and implementation of mitigation.

All comments received on the proposed rule that address (1) administrative corrections to the modeling inputs for training and testing; (2) use of more accurate seasonal density data; and (3) post-model quantification based on animal avoidance of sound sources and mitigation will be reviewed and addressed by the Navy in the HSTT Final EIS/OEIS.

For more information about the HSTT EIS/OEIS please visit: http://hstteis.com/.

Sincerely,

L. M. FOSTER
Director, Environmental Readiness
By direction

Figure E.5-1: Letter Notification of the National Marine Fisheries Service Proposed Rule (continued)

[redacted]

From: Hawaii-Southern California Training and Testing EIS/OEIS [donotreply=hstteis.com@mail129.us2.mcsv.net] on behalf of Hawaii-Southern California Training and Testing EIS/OEIS [donotreply@hstteis.com]
Sent: Thursday, January 31, 2013 12:49 PM
To: [redacted]
Subject: Hawaii-Southern California Training and Testing EIS/OEIS Proposed Rule Notification

Dear HSTT EIS/OEIS Interested Party,

The Navy is providing this update based on your interest in the Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). As part of the EIS process, the Navy has applied to the National Marine Fisheries Service (NMFS) for authorization to take marine mammals incidental to Navy training and testing activities in accordance with the Marine Mammal Protection Act (MMPA). On January 31, 2013, NMFS published in the Federal Register the MMPA Proposed Rule for public comment. The Proposed Rule can be found at:
http://hstteis.us6.list-manage1.com/track/click?u=a15c167b01e85293585c92bce&id=abd80605dc&e=bfaf206483

Comments can be provided to NMFS by either of the following methods:

(1) Electronic submissions: submit all electronic public comments via the Federal eRulemaking Portal http://hstteis.us6.list-manage.com/track/click?u=a15c167b01e85293585c92bce&id=3114c9efa4&e=bfaf206483

(2) Hand delivery or mailing of paper, disk, or CD-ROM comments should be addressed to P. Michael Payne, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910-3225.

The quantified results of the marine mammal acoustic effects analysis presented in the Navy's Letter of Authorization application to NMFS differ from the quantified results presented in the HSTT Draft EIS/OEIS. Modifications to the requested take numbers outlined in the HSTT Draft EIS/OEIS are presented in the Proposed Rule and are a result of consultation with NMFS, as well as administrative corrections to the modeling inputs for training and testing and the use of a more accurate seasonal density for the species (short-beaked common dolphins) having the highest abundance of any marine mammal in the Study Area. In consultation with NMFS, the Navy has made post-model adjustments to further refine the numerical analysis of acoustic effects so as to include animal avoidance of sound sources, avoidance of areas of activity before use of a sound source or explosive, and implementation of mitigation.

All comments received on the proposed rule that address (1) administrative corrections to the modeling inputs for training and testing; (2) use of more accurate seasonal density data; and (3) post-model quantification based on animal avoidance of sound sources and mitigation will be reviewed and addressed by the Navy in the HSTT Final EIS/OEIS.

For more information about the HSTT EIS/OEIS please visit www.HSTTEIS.com:
http://hstteis.us6.list-manage.com/track/click?u=a15c167b01e85293585c92bce&id=ec6abe1097&e=bfaf206483

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You are receiving this email because you commented on the Draft HSTT EIS/OEIS on the hstteis.com website.

Unsubscribe [redacted] from this list:
http://hstteis.us6.list-manage.com/unsubscribe?u=a15c167b01e85293585c92bce&id=40e974348c&e=bfaf206483&c=c5099409ce

1

Figure E.5-2: Email Notification of the National Marine Fisheries Service Proposed Rule

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations

Commenter	Comment	Draft Response
Marine Mammal Commission -01	The Navy assumed that marine mammals likely would avoid repeated high level exposures to a sound source that could result in injuries (i.e., PTS). It therefore adjusted its estimated numbers of takes to account for marine mammals swimming away from a sonar or other active source and away from multiple explosions to avoid repeated high-level sound exposures. The Navy did not provide a basis for this assumption or the details of its adjustment. The Navy also assumed that harbor porpoises and beaked whales would avoid certain training and testing activity areas because of high levels of vessel or aircraft traffic before the activity. It based that assumption on various publications indicating those species swim away from or avoid vessels (Barlow 1988, Polacheck and Thorpe 1990, Evans et al. 1994, Jaramillo-Legorreta et al.1999, Palka and Hammond 2001, Pirotta et al.2012). But, again, it did not explain how it adjusted the take estimates to reflect the degree of avoidance by harbor porpoises and beaked whales. Depending on conditions, marine mammals may avoid areas of excessive sound or activity. Indeed, one of the concerns regarding sound-related disturbance is that it causes marine mammals to abandon important habitats on a long-term or even permanent basis. That being said, the Commission knows of no scientifically established basis for predicting the extent to which marine mammals will abandon their habitat, which would seem to be essential information for adjusting the estimated numbers of takes. Absent the relevant information, the Commission and public cannot comment on the appropriateness of such adjustments—in essence, the regulatory process would not be sufficiently transparent.	The quantitative analysis of acoustic impacts is discussed in HSTT Final EIS/OEIS Section 3.4.3.1.6 (Quantitative Analysis), as well as in Section 6.3 (Quantitative Modeling for Impulsive and Non-Impulsive Sources), in the Navy's Request for Letter of Authorization submitted to NMFS (77 FR 60678). Specifically, post-model analysis taking into account sensitive species' avoidance of anthropogenic activity is discussed in HSTT Final EIS/OEIS Section 3.4.3.1.7 (Marine Mammal Avoidance of Sound Exposures). Background information on harbor porpoise and beaked whale sensitivity to vessels and aircraft is discussed in HSTT Final EIS/OEIS Section 3.4.3.1.2.6 (Behavioral Reactions). Reactions due to repeated exposures to sound-producing activities are discussed in HSTT Final EIS/OEIS Section 3.4.3.1.2.7 (Repeated Exposures). The model-estimated effects (without consideration of avoidance or mitigation) are provided in the *Determination of Acoustic Effects on Marine Mammals and Sea Turtles* technical report available at www.HSTTEIS.com. The Navy Acoustic Effects Model does not currently take into account avoidance behavior by sensitive species when estimating acoustic effects on marine mammals; that is, even for activities in which there is a high level of vessel or low-altitude aircraft activity prior to the start of explosive or sonar activities, sensitive animals are modeled as if they would remain stationary and tolerate any very close anthropogenic encounters. Harbor porpoises and beaked whales, however, are known to avoid anthropogenic activity (see HSTT Final EIS/OEIS Section 3.4.3.1.2.6, Behavioral Reactions). Therefore, the model-estimated effects provide an unrealistic estimate of impacts close to sound sources during certain activities. Marine mammals are not assumed to avoid or abandon important habitats on a long-term or permanent basis. Before use of explosives, sonar, or other acoustic sources, harbor porpoises and beaked whales are conservatively estimated to only avoid a region that would encompass the range to onset mortality for explosives (less than 600 yd.) or PTS for sonar and other active acoustic sources (less than 110 yd.), only if the activity is preceded by multiple vessel movements or hovering helicopters. Example ranges to these effects for specific sources are provided in HSTT Final EIS/OEIS Table 3.4-20 (explosives) and Table 3.4-11 (sonar). Therefore, the model-estimated onset mortalities (due to explosives) and PTS (due to sonar and other active acoustic sources) for harbor porpoises and beaked whales are instead assumed to be recoverable injuries (i.e., onset slight lung injury) and TTS, respectively, for the activities described above.

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
		In addition to the information already contained within the HSTT EIS/OEIS, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com.
Marine Mammal Commission -02	The Navy also indicated that its post-model analysis considered the potential for highly effective mitigation to prevent Level A harassment from exposure to sonar and other active acoustic sources and Level A harassment and mortalities from exposure to explosives. Clearly, the purpose of mitigation measures is to reduce the number and severity of takes. However, the effectiveness of the Navy's mitigation measures has not been demonstrated and remains uncertain. This is an issue that the Commission has raised many times in the past, and the Navy has recognized the need to assess the effectiveness of its mitigation measures in its ICMP and even in its recent DEIS, which states that although the use of lookouts is expected to increase the likelihood that marine species would be detected at the water's surface, it is unlikely that using those lookouts would help avoid impacts to all species because of the inherent limits of visual monitoring. The Navy has now proposed to adjust its take estimates based on both mitigation effectiveness scores and g(0)—the probability that an animal on a vessel's or aircraft's track line will be detected. According to its proposed approach, for each species the Navy would multiply a mitigation effectiveness score and a g(0) to estimate the percentage of the subject species that would be observed by lookouts and for which mitigation would be implemented, thus reducing the estimated number of marine mammal takes for Level A harassment and mortality (explosives only). The Navy then would decrease the estimated numbers of Level A harassment and mortality takes for that species to Level B or Level A harassment takes, respectively. The difficulty with this approach is in determining the appropriate adjustment factors. Again, the information needed to judge effectiveness has not been made available. In addition, the Navy did not provide the criteria (i.e., the number and types of surveillance platforms, number of lookouts, and sizes of the respective zones) needed to elicit the three mitigation effectiveness scores. Moreover, the simple	The Navy Acoustic Effects Model currently does not have the ability to account for mitigation or horizontal animal movement either as representative animal movements or as avoidance behavior (see HSTT Final EIS/OEIS Section 3.4.3.1.6.4, Model Assumptions and Limitations). While the Navy will continue to incorporate best available science and modeling methods into future versions of the Navy Acoustic Effects Model, it was necessary to perform post-model analysis to account for mitigation and avoidance behavior. A summary of the current status of the Navy's Lookout effectiveness study and why the data cannot be used in the analysis has been added in Section 5.3.1.2.4 (Effectiveness Assessment for Lookouts). The Navy believes consideration of marine mammal sightability and activity-specific mitigation effectiveness in its quantitative analysis is appropriate in order to provide decision makers a reasonable assessment of potential impacts under each alternative. A comprehensive discussion of the Navy's quantitative analysis of acoustic impacts, including the post-model analysis to account for mitigation and avoidance, is presented in the Navy's Request for Letter of Authorization under the MMPA submitted to NMFS (77 FR 60678). The assignment of mitigation effectiveness scores and the appropriateness of consideration of sightability using detection probability, g(0), when assessing the mitigation in the quantitative analysis of acoustic impacts is discussed in HSTT Final EIS/OEIS Section 3.4.3.1.8 (Implementing Mitigation to Reduce Sound Exposures). Additionally, the activity category, mitigation zone size, and number of Lookouts is provided in HSTT EIS/OEIS Tables 5.3-2 and 5.4-1. In addition to the information already contained within the HSTT EIS/OEIS, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com.Any marine mammal detection within the mitigation zones results in implementation of the appropriate mitigation measures. Details on implementation of mitigation can be found in the annual exercise reports provided to NMFS and briefed annually to NMFS and the Marine Mammal Commission. The annual exercise reports can be found at http://www.navymarinespeciesmonitoring.us/. For more information on how mitigation is implemented see HSTT EIS/OEIS Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring.

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
	detection of a marine mammal does not guarantee that mitigation measures will be effective. That is, measures of effort (i.e., numbers of lookouts and surveillance platform (s)) are not necessarily measures of effectiveness, and the Navy has not yet demonstrated that such measures of effort are reliably linked to effectiveness. Therefore, the use of those scores is unsubstantiated.	
Marine Mammal Commission -03	In addition, this approach is confusing because the Navy is inconsistent in its use of the terms “range to effects zone” and “mitigation zone,” which are not the same (see Table 11-1 of the application). More importantly, some of the mitigation zones are smaller than the estimated range to effects zones. For example, the Navy proposed a mitigation zone of 183 m after a 10 dB reduction in power for its most powerful active acoustic sources (e.g., source bin/type MF1: AN/SQS-53C) and assumed that marine mammals would leave the area near the sound source after the first three to four pings. However, for a single ping, the predicted average range to PTS is 257 m and could be as large as 267 m. That distance would increase if the activity involves multiple pings, which most do. But even with a single ping, PTS may occur well outside of the mitigation zone. In such cases, mitigation based on those zones cannot be deemed effective, no matter how many observers or observer platforms are involved. That being the case, assigning mitigation effectiveness scores based on zones that do not cover the full range to which PTS may occur is inappropriate.	The terms "range to effects zone" and "mitigation zone" are used appropriately in the discussion of mitigation in both the Navy's Request for Letter of Authorization under the MMPA submitted to NMFS (77 FR 60678) and in HSTT Final EIS/OEIS Section 5.3.2 (Mitigation Zone Procedural Measures). In summary, the range to effects zone is the distance over which the specific effects would be expected, and the mitigation zone is the distance that the Lookout will be implementing mitigation within and is developed based on the range to effects distance for injury (i.e., PTS). In all cases, the proposed mitigation zones encompass the ranges to PTS for the most sensitive marine mammal functional hearing group (see HSTT Final EIS/OEIS Table 5.3-2), which is usually the high-frequency cetacean hearing group. Therefore, the mitigation zones are even more protective for the remaining functional hearing groups (i.e., low-frequency cetaceans, mid-frequency cetaceans, and pinnipeds), and likely cover a larger portion of the potential range to onset of TTS. The Navy believes that ranges to effect for PTS that are based on spherical spreading best represent the typical range to effects near a sonar source; therefore, the ranges to effects for sonar presented in Table 11-1 of the Navy's Request for Letter of Authorization have been revised as shown in Table 5.3-2. The predicted ranges to onset of PTS for a single ping are provided for each marine mammal functional hearing group in Table 3.4-11. The single ping range to onset of PTS for sonar in sonar bin MF1 (i.e., AN/SQS-53), the most powerful source bin analyzed, is no greater than 100 m for any marine mammal functional hearing group. Furthermore, as discussed in Section 3.4.3.2.1.1 (Range to Effects), there is little overlap of PTS footprints from successive pings, indicating that in most cases, an animal predicted to receive PTS would do so from a single exposure (i.e., ping). Additional discussion regarding consideration of mitigation in the quantitative analysis of sonar and other active acoustic sources is provided in HSTT Final EIS/OEIS Section 3.4.3.2.1.2 (Avoidance Behavior and Mitigation Measures as Applied to Sonar and Other Active Acoustic Sources).
Marine Mammal Commission	The Navy used numerous references to estimate species-specific g(0)s. Those sources were based on scientific surveys of marine mammals that used both vessels and	A summary of the current status of the Navy’s Lookout effectiveness study and why the data cannot be used in the analysis has been added in Section 5.3.1.2.4 (Effectiveness Assessment for Lookouts). The Navy believes

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
-04	aircraft. It also indicated that various factors are involved in estimating g(0), including sightability and detectability of the animal (e.g., species-specific behavior and appearance, school size, blow characteristics, dive characteristics, and dive interval), viewing conditions (e.g., sea state, wind speed, wind direction, sea swell, and glare), the observer's ability to detect animals (e.g., experience, fatigue, and concentration), and platform characteristics (e.g., pitch, roll, yaw, speed, and height above water). In the DEIS, the Navy noted that due to the various detection probabilities, levels of experience, and dependence on sighting conditions, lookouts will not always be effective at avoiding impacts to all species. Yet it based its g(0) estimates on seasoned researchers conducting the associated surveys, not Navy lookouts whose observer effectiveness has yet to be determined. The Commission recommended earlier in this letter that the Navy supplement its mitigation and monitoring measures because the observer effectiveness study has yet to be completed or reviewed. It therefore would be inappropriate for the Navy to reduce the numbers of takes based on the proposed post-analysis approach because, as the Navy has described it, it does not address the issue of observer effectiveness in developing mitigation effectiveness scores and g(0).	consideration of marine mammal sightability and activity-specific mitigation effectiveness in its quantitative analysis is appropriate in order to provide decision makers a reasonable assessment of potential impacts under each alternative. A comprehensive discussion of the Navy's quantitative analysis of acoustic impacts, including the post-model analysis to account for mitigation and avoidance, is presented in the Navy's Request for Letter of Authorization under the MMPA submitted to NMFS (77 FR 60678). Additional discussion regarding the use of detection probability, g(0), in the consideration of mitigation in the quantitative analysis is provided in HSTT Final EIS/OEIS Section 3.4.3.1.8 (Implementing Mitigation to Reduce Sound Exposures).
Marine Mammal Commission -05	Based on all of these concerns, the Marine Mammal Commission recommends that the National Marine Fisheries Service authorize in the regulations the total numbers of model-estimated Level A harassment and mortality takes rather than reducing the estimated numbers of Level A harassment and mortality takes based on the Navy's proposed post-model analysis. The Navy's general approach has merit and warrants further investigation, but it cannot be deemed reliable at this point.	The post model assessment process was developed using the best available science and in coordination with NMFS, and is necessary to account for mitigation and avoidance behavior. Relying solely on the output of the Navy Acoustic Effects Model presents an overestimate of acoustic impacts for higher order effects such as injury or mortality, for the following reasons: (1) Sensitive species (i.e., beaked whales and harbor porpoises) are modeled as if they would remain stationary and tolerate any very close anthropogenic encounters, although these species are known to avoid anthropogenic activity (see HSTT Final EIS/OEIS Section 3.4.3.1.2.6, Behavioral Reactions). (2) Implementation of mitigation is not currently modeled; however, the Navy has developed mitigation measures in cooperation with NMFS that are considered effective at reducing environmental impacts while being operationally feasible (see HSTT Final EIS/OEIS Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring). (3) Animals are assumed to remain horizontally stationary in the model and tolerate any disturbing or potentially injurious sound exposure, although animals have been observed to avoid sound sources with high source levels

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
		(see HSTT Final EIS/OEIS Section 3.4.3.1.2.6, Behavioral Reactions). (4) The model estimates the potential for mortality based on very conservative criteria (see HSTT Final EIS/OEIS Section 3.4.3.1.4.8, Mortality and Injury from Explosives). With the implementation of proven mitigation and decades of historical information from conducting training and testing in the Study Area, the likelihood of mortality is very low. Additional discussion of the model-estimated impacts is in HSTT Final EIS/OEIS Section 3.4.3.1.6.4 (Model Assumptions and Limitations). A comprehensive discussion of the Navy's acoustic impact analysis, including modeling and the post-model analysis, is in HSTT Final EIS/OEIS Section 3.4.3.1.6 (Quantitative Analysis), as well as in Section 6.3 (Quantitative Modeling for Impulsive and Non-Impulsive Sources), of the Navy's Request for Letter of Authorization submitted to NMFS (77 FR 60678). In addition to the information already contained within the HSTT EIS/OEIS and the Navy's Request for Letter of Authorization, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com.
Natural Resources Defense Council-01	If the Proposed Rule is adopted, the Navy will be allowed to harm whales, dolphins, and other marine mammals nearly 9.6 million times over five years, which equates to more than 5,000 instances of take every day, nearly 220 takes every hour, more than 3.5 takes every minute for five years. NMFS's proposal includes authorizing the Navy to kill 155 marine mammals, subject more than 15 species to almost 2,000 instances of permanent hearing loss, lung injury, or other serious physiological harm, and subject almost 40 marine mammal species to millions of instances of temporary hearing loss over the life of the rule. Authorization of this amount of take would be unprecedented.[2] A direct comparison of the proposed take for Southern California and Hawaii activities for January 2014 to January 2019 and NMFS's authorized take for January 2009 to January 2014 shows a significant increase of harm in every single category of impact and an approximately 1,100 percent overall increase in harm. This increase is driven by three factors: (1) advances in the scientific literature on both hearing loss (e.g., Lucke et al. (2009) and Finneran and Schlundt (2010)) and significant disruptions in behavior (Tyack et al.	The post model assessment process was developed using the best available science and in coordination with NMFS, and is necessary to account for mitigation and avoidance behavior. Relying solely on the output of the Navy Acoustic Effects Model presents an overestimate of acoustic impacts for higher order effects such as injury or mortality, for the following reasons: (1) Sensitive species (i.e., beaked whales and harbor porpoises) are modeled as if they would remain stationary and tolerate any very close anthropogenic encounters, although these species are known to avoid anthropogenic activity (see HSTT Final EIS/OEIS Section 3.4.3.1.2.6, Behavioral Reactions). (2) Implementation of mitigation is not currently modeled; however, the Navy has developed mitigation measures in cooperation with NMFS that are considered effective at reducing environmental impacts while being operationally feasible (see HSTT Final EIS/OEIS Chapter 5, Standard Operating Procedures, Mitigation, and Monitoring). (3) Animals are assumed to remain horizontally stationary in the model and tolerate any disturbing or potentially injurious sound exposure, although animals have been observed to avoid sound sources with high source levels (see HSTT Final EIS/OEIS Section 3.4.3.1.2.6, Behavioral Reactions). (4) The model estimates the potential for mortality based on very conservative criteria (see HSTT Final EIS/OEIS Section 3.4.3.1.4.8, Mortality and Injury

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
	(2011)), showing more harm to marine mammals from intense noise than previously expected; (2) a more complete assessment of activities, including underwater detonations, which could not be ignored after a Navy training exercise off San Diego County killed at least four dolphins in 2011; and (3) an increase in proposed activities, including more than a tripling of annual surface-ship hullmounted mid-frequency sonar hours (from 4,138 hours to 15,052 hours in California and Hawaii combined). [2]Authorizing the Navy's activities would also likely result in greater take than predicted. The Navy's application to NMFS reflects a marked decline in its DEIS estimate of severe injury (e.g., permanent hearing loss and lung injury) and death after the application of a "post-model analysis" it derived for use in its application. Unfortunately, as discussed in more detail below, the Navy's post-model analysis is fraught with problems ranging from unjustified assumptions regarding the "sightability" of different species using observation rates of marine mammals specialists from differently situated platforms in ideal conditions (e.g., not at night) to questionable and unsupported assumptions regarding marine mammal avoidance behavior.	from Explosives). With the implementation of proven mitigation and decades of historical information from conducting training and testing in the Study Area, the likelihood of mortality is very low. Additional discussion of the model-estimated impacts is in HSTT Final EIS/OEIS Section 3.4.3.1.6.4 (Model Assumptions and Limitations). A comprehensive discussion of the Navy's acoustic impact analysis, including modeling and the post-model analysis, is in HSTT Final EIS/OEIS Section 3.4.3.1.6 (Quantitative Analysis), as well as in Section 6.3 (Quantitative Modeling for Impulsive and Non-Impulsive Sources), of the Navy's Request for Letter of Authorization submitted to NMFS (77 FR 60678). In addition to the information already contained within the HSTT EIS/OEIS and the Navy's Request for Letter of Authorization, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com.
Natural Resources Defense Council-02	Indeed, NMFS' estimates represent a very significant decrease from the numbers originally presented in the Navy's DEIS, which were several times those presented here and included several thousand cases of lung injury. To justify the decrease, the agency cites certain corrections made by the Navy to its modeling, the potential for marine mammals to vacate the area upon exposure to harassing noise, and—perhaps most relevant—the ability of Navy lookouts to spot marine mammals in the water. Yet none of these factors, least of all the Navy's ineffective monitoring scheme, can account for the magnitude of the adjustment. Furthermore, since NMFS does not indicate how much of a reduction each factor represents, it is impossible for the public to fully comment on this important issue, rendering notice and comment deficient under the Administrative Procedure Act ("APA"). 5 U.S.C. § 553(b), (c); 5 U.S.C. § 706(2)(D).	A comprehensive discussion of the Navy's acoustic impact analysis, including modeling and the post-model analysis, is in Section 3.4.3.1.6 (Quantitative Analysis) of this EIS/OEIS. Furthermore, within NMFS Proposed Rule (78 FR 6978), NMFS refers to Section 6.3 (Quantitative Modeling for Impulsive and Non-Impulsive Sources) of the Navy's Request for Letter of Authorization submitted to NMFS (77 FR 60678) for additional details. This information is sufficient to notify the public of the post-modeling analysis and provide the public an opportunity to comment. In addition to the information already contained within the HSTT EIS/OEIS and the Navy's Request for Letter of Authorization, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com. This report demonstrates that the differences in predicted impacts due to the post-modeling analysis and the corrections in modeling the Proposed Action made after publication of the Draft EIS/OEIS were not substantial changes in the Proposed Action that will significantly affect the environment in a manner not already considered in the Draft EIS/OEIS.

Table E.5-1: Responses to Comments on the Proposed Rule from Agencies and Non-Governmental Organizations (Continued)

Commenter	Comment	Draft Response
Natural Resources Defense Council-03	The take estimates NMFS presents in its Proposed Rule, although high, represent a significant reduction from those set forth in the Navy's DEIS, both in the lower numbers of Level B take and in the conversion of the majority of mortalities and lung injuries into non-injurious harm. Yet the agency provides only summary explanations for these significant changes, pointing to three methodological differences—some corrections for prior modeling assumptions, a discount in some types of harm for animals fleeing the area, and incorporation of mitigation into the analysis—without specifying how each factor influenced the total. NMFS' failure to provide any specific information has prevented the public from effectively commenting on this significant change in the agencies' analysis, in contravention of the APA. 5 U.S.C. § 553(b), (c); 5 U.S.C. § 706(2)(D). Moreover, insofar as the Navy has provided any information on any of these factors, it tends to suggest that the agencies have grossly overstated the effectiveness of the Navy's primary mitigation measure. Both the DEIS and the consistency determinations submitted to the California and Hawaii state coastal authorities appear to use the species-specific g(0) factors used in professional marine mammal abundance surveys—primarily undertaken by NMFS biologists—as their basis of analysis for the Navy's safety zone mitigation. It should go without saying that the Navy's sighting effectiveness is likely to be much poorer than that of experienced biologists dedicated exclusively to marine mammal detection, operating under conditions aimed at maximizing sightings. Any reliance on survey data for this purpose would clearly be arbitrary and capricious. In any case, the extraordinary size of the reduction in estimated mortalities and lung injuries suggests that NMFS has overinflated one or another of the three discounting factors mentioned above.	A summary of the current status of the Navy's Lookout effectiveness study and why the data cannot be used in the analysis has been added in Section 5.3.1.2.4, Effectiveness Assessment for Lookouts. A comprehensive discussion of the Navy's acoustic impact analysis, including modeling and the post-model analysis is in HSTT Final EIS/OEIS Section 3.4.3.1.6 (Quantitative Analysis). Furthermore, within NMFS' Proposed Rule (78 FR 6978), NMFS refers to Section 6.3 (Quantitative Modeling for Impulsive and Non-Impulsive Sources), of the Navy's Request for Letter of Authorization submitted to NMFS (77 FR 60678) for additional details. The assignment of mitigation effectiveness scores and the appropriateness of consideration of sightability using detection probability, g(0), when assessing the mitigation in the quantitative analysis of acoustic impacts is discussed in HSTT Final EIS/OEIS Section 3.4.3.1.8 (Implementing Mitigation to Reduce Sound Exposures). In addition to the information already contained within the HSTT EIS/OEIS and the Navy's Request for Letter of Authorization, and in response to public comments, the Navy has prepared a technical report which describes the process for the post modeling analysis in further detail. The Analysis of Animal Avoidance Behavior and Mitigation Effectiveness Technical Report is available at www.HSTTEIS.com.It should be noted that the estimates of acoustic impacts presented in the HSTT Draft EIS/OEIS did consider marine mammal avoidance of potentially injurious exposures to sonar and other active acoustic sources. The additional post-model analysis documented in the Navy's Request for Letter of Authorization and in this Final EIS/OEIS incorporates the following: (1) the reduction of higher-order exposures (mortality due to explosives and injury due to sonar and other active acoustic sources) due to likely avoidance of anthropogenic activity by sensitive species, (2) the potential for effective mitigation to reduce impacts, and (3) the reduction of PTS due to animal avoidance of multiple detonations, with any reduction in quantified impacts being added to the next highest category of impact in all cases (e.g., reductions in predicted PTS are added to the predicted TTS). Additionally, minor adjustments were made to the number of activities modeled to ensure the number of events modeled matched the number of training and testing events proposed by the Navy; these adjustments are reflected in the acoustic impacts quantified in the Navy's Request for Letter of Authorization and in this Final EIS/OEIS.

Appendix F: Training and Testing Activities Matrices

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APPENDIX F TRAINING AND TESTING ACTIVITIES MATRICES

F.1 STRESSORS BY TRAINING ACTIVITY

Table F-1: Stressors by Training Activity

Hawaii-Southern California Training Activity	Biological Resources																Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1,4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
ANTI-AIR WARFARE (AAW)																														
Air Combat Maneuver (ACM)						✓				✓							✓	✓		✓			✓			✓	✓			
Air Defense Exercise (ADEX)						✓	✓			✓	✓						✓	✓								✓	✓			
Gunnery Exercise (Air-to-Air)					✓	✓				✓		✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
Missile Exercise (Air-to-Air)				✓		✓				✓		✓			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
Gunnery Exercise (Surface-to-Air)				✓	✓	✓	✓			✓	✓	✓				✓	✓	✓	✓	✓				✓	✓	✓	✓			✓
Missile Exercise (Surface-to-Air)				✓	✓	✓	✓			✓	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
Missile Exercise – Man-portable Air Defense System				✓		✓				✓		✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
AMPHIBIOUS WARFARE (AMW)																														
Fire Support Exercise – Land-Based Target					✓		✓				✓						✓	✓							✓	✓				✓
Fire Support Exercise – At Sea			✓		✓		✓				✓	✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Amphibious Assault						✓	✓			✓	✓						✓	✓						✓	✓		✓			✓
Amphibious Assault – Battalion Landing							✓			✓	✓						✓	✓						✓	✓		✓			✓
Amphibious Raid						✓	✓				✓						✓	✓						✓	✓		✓			✓
Expeditionary Fires Exercise/Supporting Arms Coordination Exercise					✓	✓	✓				✓						✓	✓							✓	✓				✓
Humanitarian Assistance Operations						✓	✓			✓	✓						✓	✓						✓	✓		✓			✓
STRIKE WARFARE (STW)																														
Bombing Exercise (Air-to-Ground)						✓				✓		✓					✓	✓		✓			✓	✓		✓				
Gunnery Exercise (Air-to-Ground)						✓				✓		✓					✓	✓		✓			✓	✓		✓				

Table F-1: Stressors by Training Activity (continued)

Hawaii-Southern California Training Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors										
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1,4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
ANTI-SURFACE WARFARE (ASUW)																													
Maritime Security Operations						✓	✓			✓	✓	✓				✓	✓	✓							✓	✓	✓			✓
Gunnery Exercise (Surface-to-Surface) Ship – Small-Caliber							✓				✓	✓				✓	✓	✓		✓					✓	✓	✓			✓
Gunnery Exercise (Surface-to-Surface) Ship – Medium and Large Caliber			✓		✓		✓				✓	✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Gunnery Exercise (Surface-to-Surface) Boat – Small-Caliber							✓				✓	✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
Gunnery Exercise (Surface-to-Surface) Boat – Medium-Caliber			✓		✓		✓				✓	✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Missile Exercise (Surface-to-Surface)			✓		✓		✓				✓	✓				✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
Gunnery Exercise (Air-to-Surface) – Small-Caliber						✓				✓		✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
Gunnery Exercise (Air-to-Surface) – Medium-Caliber			✓			✓				✓	✓	✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Missile Exercise (Air-to-Surface) Rocket			✓			✓				✓	✓	✓				✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Missile Exercise (Air-to-Surface)			✓			✓				✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Bombing Exercise (Air-to-Surface)			✓			✓				✓		✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
Laser Targeting						✓	✓		✓	✓	✓						✓	✓							✓	✓	✓		✓	✓
Sinking Exercise (SINKEX)			✓		✓	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
ANTI-SUBMARINE WARFARE (ASW)																													
Tracking Exercise/Torpedo Exercise – Submarine	✓						✓			✓	✓	✓		✓						✓				✓			✓	✓		✓
Tracking Exercise/Torpedo Exercise – Surface	✓					✓	✓				✓	✓					✓	✓						✓	✓	✓	✓	✓		✓
Tracking Exercise/Torpedo Exercise – Helicopter	✓					✓	✓			✓	✓	✓			✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓
Tracking Exercise/Torpedo Exercise – Maritime Patrol Aircraft	✓					✓	✓			✓	✓	✓			✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓

Table F-1: Stressors by Training Activity (continued)

Hawaii-Southern California Training Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors										
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
ANTI-SUBMARINE WARFARE (ASW) (Continued)																													
Tracking Exercise/Torpedo Exercise – Maritime Patrol Advanced Extended Echo Ranging Sonobuoys	✓		✓			✓				✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
KILO Dip-Helicopter	✓					✓				✓							✓	✓	✓					✓	✓	✓	✓	✓		✓
Submarine Command Course (SCC) Operations	✓	✓				✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
ELECTRONIC WARFARE (EW)																													
Electronic Warfare Operations (EW Ops)						✓	✓			✓	✓						✓	✓							✓	✓	✓			✓
Counter Targeting Flare Exercise						✓				✓						✓	✓	✓		✓		✓		✓	✓	✓	✓			✓
Counter Targeting Chaff Exercise – Ship							✓				✓					✓	✓	✓				✓			✓					✓
Counter Targeting Chaff Exercise – Aircraft						✓				✓						✓	✓	✓				✓				✓				✓
MINE WARFARE (MIW)																													
Mine Countermeasure Exercise – Ship Sonar	✓						✓				✓		✓				✓	✓							✓			✓		✓
Mine Countermeasure Exercise – Surface (SMCMEX)	✓						✓				✓		✓				✓	✓							✓			✓		✓
Mine Neutralization – Explosive Ordnance Disposal (EOD)			✓			✓	✓			✓	✓	✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
Mine Countermeasure (MCM) – Towed Mine Neutralization						✓	✓	✓		✓	✓		✓				✓	✓						✓	✓	✓	✓	✓		✓
Mine Countermeasure (MCM) – Mine Detection	✓					✓	✓			✓	✓		✓				✓	✓						✓	✓	✓	✓	✓	✓	✓
Mine Countermeasure (MCM) – Mine Neutralization					✓	✓	✓			✓	✓	✓	✓			✓	✓	✓		✓				✓	✓	✓	✓		✓	✓
Mine Neutralization – Remotely Operated Vehicle			✓			✓	✓			✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Mine Laying**						✓				✓		✓					✓	✓		✓				✓	✓	✓	✓			✓

Table F-1: Stressors by Training Activity (continued)

Hawaii-Southern California Training Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
MINE WARFARE (MIW) (continued)																													
Marine Mammal System			✓													✓	✓	✓	✓				✓	✓	✓	✓	✓		✓
Shock Wave Action Generator			✓												✓				✓				✓	✓	✓	✓	✓		✓
Surf Zone Test Detachment/Equipment Test and Evaluation			✓																								✓		
Submarine Mine Exercise											✓	✓	✓														✓		✓
Civilian Port Defense	✓		✓			✓	✓	✓		✓	✓		✓				✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
NAVAL SPECIAL WARFARE (NSW)																													
Personnel Insertion/Extraction – Submarine											✓																		
Personnel Insertion/Extraction – Non-submarine						✓				✓							✓	✓	✓										
Underwater Demo Multiple Charge – Mat Weave & Obstacle Loading			✓									✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
Underwater Demolition Qualification/Certification			✓									✓	✓			✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
MAJOR TRAINING EVENTS																													
ASW for Composite Training Unit Exercise (COMPTUEX)	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
ASW for Joint Task Force Exercise (JTFEX)/Sustainment Exercise (SUSTAINEX)	✓	✓	✓			✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
Rim of the Pacific (RIMPAC) Exercise	✓	✓	✓			✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
Multi-Strike Group Exercise	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
Integrated Anti-Submarine Warfare Course (IAC)	✓	✓				✓	✓			✓	✓	✓			✓	✓	✓	✓		✓	✓			✓	✓	✓	✓	✓		✓
Group Sail	✓	✓	✓			✓	✓			✓	✓	✓			✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
Undersea Warfare Exercise (USWEX)	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓

Table F-1: Stressors by Training Activity (continued)

Hawaii-Southern California Training Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors										
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
MAJOR TRAINING EVENTS (continued)																													
Ship ASW Readiness and Evaluation Measuring (SHAREM)	✓	✓	✓			✓	✓			✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓
OTHER TRAINING EXERCISES																													
Precision Anchoring							✓				✓		✓				✓	✓						✓	✓		✓			✓
Small Boat Attack					✓		✓				✓					✓	✓	✓		✓										
Offshore Petroleum Discharge System (OPDS)																	✓	✓												
Elevated Causeway System (ELCAS)		✓																							✓			✓		
Submarine Navigation	✓										✓																✓	✓		✓
Submarine Under Ice Certification	✓										✓																✓	✓		✓
Salvage Operations													✓				✓	✓	✓					✓			✓			✓
Surface Ship Sonar Maintenance	✓						✓				✓																	✓		
Submarine Sonar Maintenance	✓										✓																	✓		

[1] Cultural resources stressor
[2] Socioeconomics stressor
[3] Public health and safety stressor
[4] Acoustics Stressor includes only underwater explosives and airborne sonic booms
** Alternative 1 and Alternative 2 only
Note: A check indicates events that take place for all alternatives.

F.2 STRESSORS BY TESTING ACTIVITY

Table F-2: Stressors by Testing Activity

Hawaii-Southern California Testing Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
Naval Air Systems Command																													
ANTI-AIR WARFARE (AAW)																													
Air Combat Maneuver (ACM)						✓				✓							✓	✓								✓	✓			✓
Air Platform/Vehicle Test						✓				✓		✓					✓	✓		✓						✓	✓		✓	✓
Air Platform Weapons Integration Test						✓				✓		✓				✓	✓	✓	✓	✓					✓	✓	✓			✓
Intelligence, Surveillance, and Reconnaissance Test						✓				✓							✓	✓								✓	✓			✓
ANTI-SURFACE WARFARE (ASUW)																													
Air-to-Surface Missile Test			✓			✓				✓		✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Air-to-Surface Gunnery Test			✓		✓	✓				✓		✓				✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
Rocket Test			✓			✓				✓		✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Laser Targeting Test						✓				✓							✓	✓								✓	✓		✓	✓
ELECTRONIC WARFARE (EW)																													
Electronic System Evaluation						✓				✓							✓	✓								✓	✓			✓
ANTI-SUBMARINE WARFARE (ASW)																													
Anti-Submarine Warfare Torpedo Test	✓					✓				✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓
Kilo Dip	✓					✓				✓							✓	✓							✓	✓	✓	✓		✓
Sonobuoy Lot Acceptance Test	✓		✓			✓	✓			✓	✓	✓			✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
Anti-Submarine Warfare Tracking Test – Helicopter	✓		✓			✓				✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Anti-Submarine Warfare Tracking Test – Maritime Patrol Aircraft	✓		✓			✓				✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓

Table F-2: Stressors by Testing Activity (continued)

Hawaii-Southern California Testing Activity		Biological Resources															Physical Resources						Human Resources							
		Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
		Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
MINE WARFARE (MIW)																														
Airborne Mine Neutralization Systems Test (AMNS)				✓			✓				✓		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Airborne Towed Minehunting Sonar System Test		✓					✓				✓	✓						✓	✓							✓	✓	✓	✓	✓
Airborne Towed Minesweeping System Test				✓			✓		✓		✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Airborne Laser-Based Mine Detection System Test – ALMDS							✓				✓							✓	✓							✓	✓	✓		✓	✓
Airborne Projectile-based Mine Clearance System Test				✓			✓				✓		✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
OTHER TESTING ACTIVITIES																														
Test and Evaluation Catapult Launch							✓	✓			✓	✓						✓	✓							✓	✓	✓		✓
Air Platform Shipboard Integrate Test							✓				✓							✓	✓							✓	✓	✓		✓
Shipboard Electronic Systems Evaluation							✓				✓							✓	✓								✓	✓		✓
NAVAL SEA SYSTEMS COMMAND																														
NEW SHIP CONSTRUCTION																														
Surface Combatant Sea Trials	Pierside Sonar Testing**	✓	✓																									✓		
	Propulsion Testing							✓				✓						✓	✓							✓		✓		✓
	Gun Testing, Large-Caliber					✓		✓				✓	✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
	Missile Testing				✓	✓	✓	✓			✓	✓	✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
	Decoy Testing							✓				✓	✓				✓	✓	✓			✓				✓		✓			✓
	Anti-Surface Warfare Testing					✓		✓				✓	✓					✓	✓		✓				✓	✓	✓	✓			✓
	Anti-Submarine Warfare Testing	✓	✓					✓				✓						✓	✓		✓	✓	✓			✓		✓	✓		✓

Table F-2: Stressors by Testing Activity (continued)

Hawaii-Southern California Testing Activity		Biological Resources																Physical Resources						Human Resources							
		Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
		Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1, 4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
NEW SHIP CONSTRUCTION (Continued)																															
Other Ship Class Sea Trials*	Propulsion Testing							✓				✓						✓	✓							✓		✓			✓
	Gun Testing – Small-Caliber							✓				✓	✓				✓	✓	✓							✓	✓	✓			✓
ASW Mission Package Testing		✓					✓	✓			✓	✓	✓			✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓
ASUW Mission Package Testing	Gun Testing – Small-Caliber					✓		✓				✓	✓				✓	✓	✓		✓				✓	✓	✓	✓			✓
	Gun Testing – Medium-Caliber			✓	✓	✓		✓				✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
	Gun Testing – Large-Caliber			✓	✓	✓		✓				✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
	Missile/Rocket Testing			✓		✓	✓	✓			✓	✓	✓				✓	✓	✓	✓				✓	✓	✓	✓	✓	✓		✓
MCM Mission Package Testing**		✓		✓			✓	✓			✓	✓					✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓
Post-Homeporting Testing (All Classes)**								✓				✓						✓	✓							✓		✓			✓
LIFECYCLE ACTIVITIES																															
Ship Signature Testing**								✓				✓						✓	✓									✓			✓
Surface Ship Sonar Testing/Maintenance (in OPAREAs and Ports)**		✓	✓					✓				✓						✓	✓									✓	✓		✓
Submarine Sonar Testing/Maintenance (in OPAREAs and Ports)**		✓	✓									✓																✓	✓		✓
Combat System Ship Qualification Trial (CSSQT) – In-port Maintenance Period**		✓																											✓		
Combat System Ship Qualification Trial (CSSQT) – Air Defense**					✓	✓	✓	✓			✓	✓	✓				✓	✓	✓		✓		✓		✓		✓	✓			✓
Combat System Ship Qualification Trial (CSSQT) – Anti-Surface Warfare**					✓	✓		✓				✓	✓				✓	✓	✓		✓		✓		✓		✓	✓			✓
Combat System Ship Qualification Trial (CSSQT) – Undersea Warfare**		✓					✓	✓			✓	✓	✓			✓	✓	✓	✓		✓		✓		✓		✓	✓	✓		✓

Table F-2: Stressors by Testing Activity (continued)

Hawaii-Southern California Testing Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1,4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
ANTI-SURFACE WARFARE/ANTI-SUBMARINE WARFARE TESTING																													
Missile Testing**					✓		✓			✓	✓	✓					✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
Kinetic Energy Weapon Testing**					✓		✓				✓	✓					✓	✓	✓	✓	✓			✓	✓	✓	✓			✓
Electronic Warfare Testing**											✓																✓			✓
Torpedo (Non-explosive) Testing	✓	✓				✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Torpedo (Explosive) Testing	✓		✓			✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Countermeasure Testing**	✓	✓					✓				✓						✓	✓						✓			✓	✓		✓
Pierside Sonar Testing**	✓																											✓		
At-sea Sonar Testing**	✓	✓					✓				✓	✓					✓	✓									✓	✓		✓
MINE WARFARE TESTING																														
Mine Detection and Classification Testing**	✓					✓	✓			✓	✓						✓	✓							✓	✓	✓	✓		✓
Mine Countermeasure/Neutralization Testing**	✓		✓			✓	✓	✓		✓	✓			✓		✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		✓
Pierside Systems Health Checks**	✓	✓																												
SHIPBOARD PROTECTION SYSTEMS AND SWIMMER DEFENSE TESTING																														
Pierside Integrated Swimmer Defense	✓	✓											✓											✓		✓		✓		✓
Shipboard Protection Systems Testing**							✓				✓	✓				✓	✓	✓		✓						✓	✓	✓		✓
Chemical/Biological Simulant Testing**						✓	✓			✓	✓						✓	✓			✓	✓			✓	✓	✓			✓

Table F-2: Stressors by Testing Activity (continued)

Hawaii-Southern California Testing Activity	Biological Resources															Physical Resources						Human Resources							
	Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors										
	Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives	Metals	Chemicals	Other Materials	Acoustics [1,4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
UNMANNED VEHICLE TESTING																													
Underwater Deployed Unmanned Aerial System Testing**						✓				✓	✓	✓								✓				✓	✓		✓			✓
Unmanned Vehicle Development and Payload Testing**	✓					✓	✓				✓		✓											✓	✓		✓	✓		✓
OTHER TESTING																														
Special Warfare	✓	✓					✓				✓																✓	✓		✓
Acoustic Communications Testing**							✓				✓																✓			✓
SPACE AND NAVAL WARFARE SYSTEMS COMMAND																														
Autonomous Undersea Vehicle (AUV) Anti-Terrorism/Force Protection (AT/FP) Mine Countermeasures		✓									✓																			
AUV Underwater Communications		✓									✓																			
Fixed System Underwater Communications		✓							✓		✓		✓	✓																
AUV Autonomous Oceanographic Research and Meteorology and Oceanography (METOC)		✓																												
Fixed Autonomous Oceanographic Research and METOC		✓											✓																	
Passive Mobile Intelligence, Surveillance, and Reconnaissance Sensor Systems		✓					✓				✓																			
Fixed Intelligence, Surveillance, and Reconnaissance Sensor Systems		✓					✓				✓		✓	✓																
Anti-Terrorism/Force Protection (AT/FP) Fixed Sensor Systems		✓																												
OFFICE OF NAVAL RESEARCH																														
Kauai Acoustic Communications Experiment (Coastal)																														

[1] Cultural resources stressor, [2] Socioeconomics stressor; [3] Public health and safety stressor, [4] Acoustics stressor includes only underwater explosives and airborne sonic booms, ** Alternative 1 and Alternative 2 only
Notes: (1) A check indicates events that take place for all alternatives; (2) * "Other Ships" indicates classes of vessels without hull-mounted sonar. Example ship classes include: LCS, MLP, and T-AKE.

F.3 STRESSORS BY RESOURCE

Table F-3: Stressors by Resource

Stressors vs. Resources		Biological Resources																Physical Resources						Human Resources							
		Acoustic Stressors							Energy Stressors		Physical Stressors				Entanglement Stressors		Ingestion Stressors	Air Quality Stressors		Sediment and Water Quality Stressors											
		Tactical Acoustic Sonar	Other Acoustic Devices	Underwater Explosives	In-air Explosives	Weapons Firing Noise	Aircraft Noise	Vessel and Simulated Vessel Noise	Electromagnetic Devices	Lasers	Aircraft and Aerial Target Strikes	Vessel and In-water Device Strikes	Military Expended Materials	Seafloor Devices	Fiber Optic Cables and Guidance Wires	Parachutes	Military Expended Materials	Criteria Air Pollutants	Hazardous Air Pollutants	Explosives and Explosive Byproducts	Metals	Chemicals Other than Explosives	Other Materials	Acoustics [1,4]	Physical Disturbance [1]	Accessibility [2]	Airborne Acoustics [2]	Physical Disturbance and Strikes [2]	Underwater Energy [3]	In-Air Energy [3]	Physical Interactions [3]
Physical	Sediments and Water Quality																			✓	✓	✓	✓								
	Air Quality																	✓	✓												
Biological	Marine Habitats			✓								✓	✓	✓																	
	Marine Mammals	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓								
	Sea Turtles	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓								
	Birds	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				✓	✓	✓												
	Marine Vegetation			✓								✓	✓	✓						✓	✓	✓	✓								
	Marine Invertebrates	✓	✓	✓					✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓								
	Fish	✓	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓								
Human	Cultural Resources			✓			✓						✓	✓										✓	✓						
	Socioeconomic Resources		✓	✓	✓	✓	✓	✓				✓	✓		✓	✓				✓	✓	✓	✓			✓	✓	✓			
	Public Health and Safety	✓	✓	✓	✓	✓				✓	✓	✓	✓																✓	✓	✓

[1] Cultural resources stressor, [2] Socioeconomics stressor, [3] Public health and safety stressor, [4] Acoustics stressor includes only underwater explosives and airborne sonic booms

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Appendix G: Statistical Probability Analysis for Estimating Direct Strike Impact and Number of Potential Exposures

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APPENDIX G STATISTICAL PROBABILITY ANALYSIS FOR ESTIMATING DIRECT STRIKE IMPACT AND NUMBER OF POTENTIAL EXPOSURES

This appendix discusses the methods and results for calculating the probability of a direct strike of an animal from any military items from the proposed training and testing activities falling toward (or directed at) the sea surface. For the purposes of this appendix, military items include non-explosive practice munitions (e.g., rounds from shipboard small-arms live-fire training), sonobuoys, acoustic countermeasures, and targets. Only marine mammals and sea turtles will be analyzed using these methods because animal densities are necessary to complete the calculations, and density estimates are currently only available for marine mammals and sea turtles within the Hawaii-Southern California Training and Testing (HSTT) Study Area (Study Area). Furthermore, the analysis conducted here does not account for explosive munitions because impacts from explosives are analyzed within the United States (U.S.) Department of the Navy (Navy) Acoustic Effects Model.

G.1 DIRECT IMPACT ANALYSIS

A statistical probability was calculated to estimate the impact probability (P) and number of exposures (T) associated with direct impact of military items on marine animals on the sea surface within the specified training or testing area (R) in which the activities are occurring. The statistical probability analysis is based on probability theory and modified Venn diagrams with rectangular "footprint" areas for the individual animal (A) and total impact (I) inscribed inside the training or testing area (R). The analysis assumes: (1) that all animals would be at or near the surface 100 percent of the time, when in fact, marine mammals spend the majority of their time underwater, and (2) that the animals are stationary, which does not account for any movement or any potential avoidance of the training or testing activity.

1. A = length*width, where the individual animal's width (breadth) is assumed to be 20 percent of its length for marine mammals and 112 percent of its length for sea turtles. This product for A is multiplied by the number of animals N_a in the specified training or testing area (i.e., product of the highest average seasonal animal density [D] and training or testing area [R]: $N_a = D*R$) to obtain the total animal footprint area ($A*N_a = A*D*R$) in the training or testing area. As a worst case scenario, the total animal footprint area is calculated for the species with the highest average seasonal density in the training or testing area with the highest use of military items within the entire Study Area.

2. $I = N_{mun}$*length*diameter, where N_{mun} = total annual number of military items for each type, and "length" and "diameter" refer to the individual military equipment dimensions. For each type, the individual impact footprint area is multiplied by the total annual number of military items to obtain the type-specific impact footprint area ($I = N_{mun}$*length*diameter). Each training or testing activity uses one or more different types of military items, each with a specific number and dimensions, and several training and testing activities occur in a given year. When integrating over the number of military items types for the given activity (and then over the number of activities in a year), these calculations are repeated (accounting for differences in dimensions and numbers) for all military items types used, to obtain the type-specific impact footprint area (I). These impact footprint areas are summed over all military items types for the given activity, and then summed (integrated) over all activities to obtain the total impact footprint area resulting from all activities occurring in the training or testing area in a given year.

As a worst case scenario, the total impact footprint area is calculated for the training or testing area with the highest use of military items within the entire Study Area.

Though marine mammals and sea turtles are not randomly distributed in the environment, a random point calculation was chosen due to the intensive data needs that would be required for a calculation that incorporated more detailed information on an animal's or military item's spatial occurrence.

The analysis is expected to provide an overestimation of the probability of a strike for the following reasons: (1) it calculates the probability of a single military item (of all the items expended over the course of the year) hitting a single animal at its species' highest seasonal density; (2) it does not take into account the possibility that an animal may avoid military activities; (3) it does not take into account the possibility that an animal may not be at the water surface; (4) it does not take into account that most projectiles fired during training and testing activities are fired at targets; and so only a very small portion of those projectiles that miss the target would hit the water with their maximum velocity and force; and (5) it does not quantitatively take into account the Navy avoiding animals that are sighted through the implementation of mitigation measures.

The likelihood of an impact is calculated as the probability (P) that the animal footprint (A) and the impact footprint (I) will intersect within the training or testing area (R). This is calculated as the area ratio A/R or I/R, respectively. Note that A (referring to an **individual** animal footprint) and I (referring to the impact footprint resulting from the **total** number of military items N_{mun}) are the relevant quantities used in the following calculations of single-animal impact probability [P], which is then multiplied by the number of animals to obtain the number of exposures (T). The probability that the random point in the training or testing area is within both types of footprints (i.e., A and I) depends on the degree of overlap of A and I. The probability that I overlaps A is calculated by adding a buffer distance around A based on one-half of the impact area (i.e., 0.5*I), such that an impact (center) occurring anywhere within the combined (overlapping) area would impact the animal. Thus, if L_i and W_i are the length and width of the impact footprint such that $L_i*W_i = 0.5*I$ and $W_i/L_i = L_a/W_a$ (i.e., similar geometry between the animal footprint and impact footprint), and if L_a and W_a are the length and width (breadth) of the individual animal such that $L_a*W_a = A$ (= individual animal footprint area), then, assuming a purely static, rectangular scenario (Scenario 1), the total area $A_{tot} = (L_a + 2*L_i)*(W_a + 2*W_i)$, and the buffer area $A_{buffer} = A_{tot} – L_a*W_a$.

Four scenarios were examined with respect to defining and setting up the overlapping combined areas of A and I:

1. **Scenario 1:** Purely static, rectangular scenario. Impact is assumed to be static (i.e., direct impact effects only; non-dynamic; no explosions or scattering of military items after the initial impact). Hence the impact footprint area (I) is assumed to be rectangular and given by the product of military items length and width (multiplied by the number of military items). $A_{tot} = (L_a + 2*L_i)*(W_a + 2*W_i)$ and $A_{buffer} = A_{tot} – L_a*W_a$.

2. **Scenario 2:** Dynamic scenario with end-on collision, in which the length of the impact footprint (Li) is enhanced by Rn = 5 military items lengths to reflect forward momentum. $A_{tot} = (L_a + (1 + R_n)*L_i)*(W_a + 2*W_i)$ and $A_{buffer} = A_{tot} – L_a*W_a$.

3. **Scenario 3:** Dynamic scenario with broadside collision, in which the width of the impact footprint (W_i) is enhanced by $R_n = 5$ military items lengths to reflect forward momentum. Atot = $(L_a + 2*W_i)*(W_a + (1 + R_n)*L_i)$ and $A_{buffer} = A_{tot} – L_a*W_a$.

4. **Scenario 4:** Purely static, radial scenario, in which the rectangular animal and impact footprints are replaced with circular footprints while conserving area. Define the radius (R_a) of the circular individual animal footprint such that $\pi*R_a^2 = L_a*W_a$, and define the radius (R_i) of the circular impact footprint such that $\pi *R_i^2 = 0.5*L_i*W_i = 0.5*I$. Then $A_{tot} = \pi *(R_a + R_i)^2$ and $A_{buffer} = A_{tot} - \pi *R_a^2$ (where $\pi = 3.1415927$).

Static impacts (Scenarios 1 and 4) assume no additional areal coverage effects of scattered military items beyond the initial impact. For dynamic impacts (Scenarios 2 and 3), the distance of any scattered military items must be considered by increasing the length (Scenario 2) or width (Scenario 3), depending on orientation (broadside versus end-on collision), of the impact footprint to account for the forward horizontal momentum of the falling object. Forward momentum typically accounts for five object lengths, resulting in a corresponding increase in impact area. Significantly different values may result from these two types of orientation. Both of these types of collision conditions can be calculated each with 50 percent likelihood (i.e., equal weighting between Scenarios 2 and 3, to average these potentially different values).

Impact probability P is the probability of impacting one animal with the given number, type, and dimensions of all military items used in training or testing activities occurring in the area per year, and is given by the ratio of total area (A_{tot}) to training or testing area (R): $P = A_{tot}/R$. Number of exposures is $T = N*P = N*A_{tot}/R$, where N = number of animals in the training or testing area per year (given as the product of the animal density [D] and range size [R]). Thus, $N = D*R$ and hence $T = N*P = N*A_{tot}/R = D*A_{tot}$. Using this procedure, P and T were calculated for each of the four scenarios, for Endangered Species Act (ESA)-listed marine mammals and the marine mammal and sea turtle species with the highest average seasonal density (used as the annual density value) and for each military item type. The scenario -specific P and T values were averaged over the four scenarios (using equal weighting) to obtain a single scenario -averaged annual estimate of P and T.

G.2 PARAMETERS FOR ANALYSIS

Impact probabilities (P) and number of exposures (T) were estimated by the analysis for the following parameters:

1. **Three proposed alternatives:** No Action Alternative, Alternative 1, and Alternative 2. Animal densities, animal dimensions, and military item dimensions are the same for the three alternatives.

2. **Two Training or Testing Areas:** Hawaii Range Complex (HRC) and Southern California (SOCAL) Operating Areas (OPAREA). Areas are 235,000 square nautical miles (nm^2) and 120,000 nm^2, respectively. These two training areas were chosen because they constitute the areas with the highest estimated numbers and concentrations of military expended materials for each alternative, and would, thus, provide a reasonable comparison for all other areas with fewer expended materials.

3. **The following types of munitions or other items:**

    a) **Small-caliber projectiles:** up to and including 0.50 caliber rounds
    b) **Medium-caliber projectiles:** larger than 0.50 caliber rounds but smaller than 57 millimeter (mm) projectiles
    c) **Large-caliber projectiles:** includes projectiles greater than or equal to a 57 mm projectile

d) **Missiles:** includes rockets and jet-propelled munitions
e) **Bombs:** Non-explosive practice bombs and mine shapes, ranging from 10 to 2,000 pounds (lb.) (4.5 to 907.2 kilograms [kg])
f) **Torpedoes:** includes aircraft deployed torpedoes
g) **Sonobuoys:** includes aircraft deployed sonobuoys

4. **Animal species of interest:** the six species of ESA-listed marine mammals and the non-ESA listed marine mammal species with the highest average seasonal density in the training and testing areas of interest. The sea turtle species with the highest average seasonal density in the training and testing areas of interest.

G.3 INPUT DATA

Input data for the direct strike analysis include animal species likely to be in the area and military items proposed for use under each of the three alternatives. Animal species data include: (1) species ID and status (i.e., threatened, endangered, or neither), (2) highest average seasonal density estimate for the species of interest, and (3) adult animal dimensions (length and width) for the species with the highest density. The animal's dimensions are used to calculate individual animal footprint areas (A = length*width), and animal densities are used to calculate the number of exposures (T) from the impact probability (P): T = N*P. Military items data include: (1) military items category (e.g., projectile, bomb, rocket, target), (2) military items dimensions (length and width), and (3) total number of military items used annually.

Military items input data, specifically the quantity (e.g., numbers of guns, bombs, and rockets), are different in magnitude among the three proposed alternatives (No Action Alternative, Alternative 1, and Alternative 2). All animal species input data, the military items identification and category, and military items dimensions, are the same for the three alternatives, only the quantities (i.e., total number of military items) are different.

G.4 OUTPUT DATA

Estimates of impact probability (P) and number of exposures (T) for a given species of interest, were made for the specified training or testing area with the highest annual number of military items used for each of the three alternatives. The calculations derived P and T from the highest annual number of military items used in the Study Area for the given alternative. Differences in P and T among the alternatives arise from different numbers of events (and therefore military items) for the three alternatives.

Results for marine mammals and sea turtles are presented in Table G-1 and Table G-2.

Table G-1: Estimated Annual Marine Mammal Exposures from Direct Strike of Munitions and Other Items by Area and Alternative

Pacific Marine Ecosystem						
HAWAII Operating Area						
Species	**Training**			**Testing**		
	No Action	**Alternative 1**	**Alternative 2**	**No Action**	**Alternative 1**	**Alternative 2**
Humpback	0.00011	0.00015	0.00015	<0.00001	0.00003	0.00003
Blue Whale	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001
Fin Whale	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001
Sei Whale	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001
Sperm Whale	0.00015	0.00028	0.00028	0.00001	<0.00001	<0.00001
Hawaiian Monk Seal	<0.00001	0.00001	0.00001	<0.00001	<0.00001	<0.00001
Southwest Coast United States Continental Shelf Large Marine Ecosystem						
SOUTHERN CALIFORNIA Operating Area						
Species	**Training**			**Testing**		
	No Action	**Alternative 1**	**Alternative 2**	**No Action**	**Alternative 1**	**Alternative 2**
Humpback Whale	0.00032	0.00060	0.00060	0.00001	0.00005	0.00006
Blue Whale	0.00001	0.00002	0.00002	<0.00001	<0.00001	<0.00001
Fin Whale	0.00001	0.00002	0.00002	<0.00001	<0.00001	<0.00001
Sei Whale	0.00001	0.00003	0.00003	<0.00001	<0.00001	<0.00001
Sperm Whale	0.00044	0.00082	0.00082	0.00002	0.00007	0.00008
Guadalupe Fur Seal	0.00006	0.00006	0.00006	<0.00001	0.00001	0.00001

Table G-2: Estimated Sea Turtle Exposures from Direct Strike of Military Expended Materials by Area and Alternative

Pacific Marine Ecosystem						
HAWAII Operating Area						
Species	**Training**			**Testing**		
	No Action	**Alternative 1**	**Alternative 2**	**No Action**	**Alternative 1**	**Alternative 2**
Pacific Sea Turtle Guild	0.01361	0.02011	0.01937	0.00049	0.00432	0.00457

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