



# **Silver Strand Training Complex**

## **Environmental Impact Statement**

Commander  
United States Navy Pacific Fleet

*Lead Agency:*  
Department of the Navy

*Action Proponent:*  
United States Pacific Fleet

*Cooperating Agency:*  
Department of Commerce  
National Oceanographic and Atmospheric Administration  
National Marine Fisheries Service

Appendices A - G

**January 2011**

**Point of Contact:** Amy P. Kelley  
Naval Facilities Engineering Command Southwest  
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1220 Pacific Highway  
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Appendix A  
Federal Register Notice of Intent



## Appendix A: Notice of Intent

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1. The SSA will use 60-0103, entitled 'Supplemental Security Income Record and Special Veterans Benefits', last published on February 21, 2001 at 66 FR 11080.

2. The DMDC will use S322.10 DMDC, entitled 'Defense Manpower Data Center Data Base', last published on May 31, 2001 at 66 FR 29552.

### E. DESCRIPTION OF COMPUTER MATCHING PROGRAM:

SSA, as the source agency, will provide DMDC with an electronic file which contains the data elements. Upon receipt of the electronic file, DMDC, as the recipient agency, will perform a computer match using all nine digits of the SSN of the SSI/SVB file against a DMDC database which contains the data elements. The DMDC database consists of extracts of personnel and pay records of retired members of the uniformed services or their survivors. The "hits" or matches will be furnished to SSA. SSA is responsible for verifying and determining that the data on the DMDC electronic reply file are consistent with the SSA source file and resolving any discrepancies or inconsistencies on an individual basis. SSA will also be responsible for making final determinations as to eligibility for /entitlement to, or amount of payments/benefits, their continuation or needed adjustments, or any recovery of overpayments as a result of the match. The DMDC database consists of extracts of personnel and pay records of retired members of the uniformed services or their survivors.

1. The electronic SSA query file contains approximately 6.5 million records extracted from the Supplemental Security Income Record.

2. The electronic DMDC database contains records on approximately 2.15 million retired uniformed service members or their survivors.

### F. INCLUSIVE DATES OF THE MATCHING PROGRAM:

This computer matching program is subject to public comment and review by Congress and the Office of Management and Budget. If the mandatory 30 day period for comment has expired and no comments are received and if no objections are raised by either Congress. The Office of Management and Budget within 40 days of being notified of the proposed match, the computer matching program becomes effective and the respective agencies may begin the exchange at a mutually agreeable time on a quarterly basis, shifting to a monthly basis when and if the computer system work can be completed to effectuate the increased frequency. By agreement between SSA

and DMDC, the matching program will be in effect for 18 months with an option to renew for 12 additional months unless one of the parties to the agreement advises the other by written request to terminate or modify the agreement.

### G. ADDRESS FOR RECEIPT OF PUBLIC COMMENTS OR INQUIRIES:

Director, Defense Privacy Office, 1941 Jefferson Davis Highway, Suite 920, Arlington, VA 22202-4502. Telephone (703) 607-2943.

[FR Doc. 01-19591 Filed 8-3-01; 8:45 am]

BILLING CODE 5001-08-M

## DEPARTMENT OF DEFENSE

### Department of the Navy

#### Notice of Intent To Prepare an Environmental Impact Statement (EIS) for Optimizing Current and Future Operations, Training and Maintenance at the Beaches of Naval Amphibious Base (NAB) Coronado and Naval Radio Receiving Facility (NRRF) Imperial Beach and To Announce Public Scoping Meetings

AGENCY: Department of the Navy, DOD.  
ACTION: Notice.

**SUMMARY:** The Department of the Navy (Navy) announces its intent to prepare an Environmental Impact Statement (EIS) to evaluate the environmental effects of current and future operations, training and maintenance at the beaches of Naval Amphibious Base Coronado, "NAB", Naval Radio Receiving Facility Imperial Beach, "NRRF", and within the fenced compound at NRRF.

**DATES AND ADDRESSES:** Public scoping open houses will be held to receive oral and/or written comments on environmental concerns that should be addressed in the EIS. Public scoping open houses will be held from 7:00 to 8:30 p.m. the following dates and locations: Tuesday, August 28, 2001 at the Coronado Public Library (Winn Room), 640 Orange Avenue, Coronado, CA; Wednesday, August 29, 2001 at Bayside Elementary School, 490 Emory Street, Imperial Beach, CA.

**FOR FURTHER INFORMATION CONTACT:** Ms. Jenny Boyd, South Bay Area Focus Team, Southwest Division, Naval Facilities Engineering Command, 2585 Callagan Highway, Building 99, San Diego, CA 92136-5198, telephone (619) 556-8589.

**SUPPLEMENTARY INFORMATION:** Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on

Environmental Quality Regulations (40 CFR Parts 1500-1508), the Department of the Navy (Navy) announces its intent to prepare an Environmental Impact Statement (EIS) to evaluate the environmental effects of current and future operations, training and maintenance at the beaches of Naval Amphibious Base Coronado, "NAB", Naval Radio Receiving Facility Imperial Beach, "NRRF", and within the fenced compound at NRRF.

NAB Coronado is the only Navy amphibious base on the West Coast. It includes 5,500 yards of Pacific Ocean and bayside beachfront that is used for training. This area, along with 2,000 yards of Pacific Ocean beachfront at NRRF, provide operators with 7,500 yards of expansive beaches, unique topography, and on-base facilities that encompass a critical area for amphibious and clandestine training in support of littoral, unconventional, and special warfare operations.

The proposed action is to allocate operations and training between NAB and NRRF in a manner that optimizes use of those facilities while protecting threatened and endangered species. Operationally realistic training at NAB and NRRF is critical to military mission readiness requirements. However, due to the Navy's on-going, successful resource management program, threatened and endangered biological resources are thriving on the beaches at NAB Coronado. This poses a problem for scheduling required training because the increase in least tern and snowy plover populations is decreasing the size of beachfront available for crucial training and the time during which it is available.

NAB has reviewed its current and future operations, training and maintenance requirements as well as the training needs of tenant commands and other commands in Southern California that use the training facilities at NAB. The EIS will address three alternatives (including the No Action Alternative) for optimizing training at NAB and NRRF based on that internal review.

The No Action Alternative would continue current levels of operations at NAB and NRRF and utilize natural resource management strategies identified in NAB's natural resource management plan. While most operations and training currently are conducted at NAB, a limited number of amphibious training operations are conducted at NRRF. Specific operations are delineated for each location. Current operations delineated for NAB include Warfare Training (amphibious assaults and combat training, clandestine shore assaults, mine countermeasures,

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navigation/surf handling training, SCUBA training, ship surveillance) and Strategic Sealift Training (Elevated Causeway System Training) on the Pacific Ocean beachfront. Current bay-side operations also include Warfare Training (amphibious assaults and clandestine shore assaults) and Strategic Sealift Training (ELCAS, amphibious assault bulk fuel/water systems). NAB also supports several training area users that have unique training requirements. One of the larger users is the Marine Corp's Expeditionary Warfare Training Group, Pacific. Their primary mission is to conduct warfare training courses for expeditionary and amphibious operations with emphasis on landing force operations using amphibious platforms. Current operations delineated for NRRF include inflatable landing craft, practice assault beaching and underwater navigation techniques. Current resource management strategies will continue with the habitat maintenance practice of predator control, decoy placement, beach maintenance, and coning off Western snowy plover nests on the beaches at NAB. It will also continue using the formal scheduling process for training operations.

Alternative One proposes a more integrated use of NAB and NRRF for current operations as well as the addition of new types of operations at NAB and NRRF. Under Alternative One, all 7,500 yards of beach area at NAB and NRRF would be available to support current operations. This alternative recognizes the dynamic that exists between operational uses and protection of natural resources. As the most significant natural resource issues at NAB involve nesting and foraging, location and timing of operations are critical considerations. Training operations often conflict with nesting season of growing least tern and snowy plover populations. Alternative One would provide operators with the option of training at NAB or NRRF during nesting season and would address the complete range of impacts of training at both NAB and NRRF.

Rather than a rigid matrix that pairs specific operations with a specific location, Alternative One proposes that decisions on the location of operations be based upon the ability of the location to handle a given type and level of operations at a given time of year. This would allow greater flexibility for year round use of NAB and NRRF. The following operations are included under Alternative One: Warfare Training, Strategic Sealift Training, and landing force operations currently conducted at NAB; inflatable landing craft, practice

assault beaching, and underwater navigation techniques currently conducted at NRRF; and new operations consisting of mine disabling training in San Diego Bay along the NAB shoreline; new operations consisting of ordnance disposal training and land reconnaissance exercises on the beach and within the fenced compound at NRRF.

In addition to the current habitat maintenance practice of predator control, decoy placement, beach maintenance, coning off Western snowy plover nests and using a formal scheduling procedure, Alternative One proposes to incorporate coning off California least tern nests and clearly delineating beach-crossing lanes.

Alternative Two proposes to relocate the majority of current Warfare Training, Strategic Sealift Training, and landing force operations from NAB to NRRF during nesting season. Current operations involving inflatable landing craft, practice assault beaching, and underwater navigation techniques would continue at NRRF. Alternative Two also includes: the addition of mine disabling training in San Diego Bay along the NAB shoreline, new ordnance disposal training, and land reconnaissance exercises on the beach and within the fenced compound at NRRF. Alternative Two also proposes the additional habitat maintenance practices of coning off California least tern nests and clearly delineating beach-crossing lanes, as proposed in Alternative One at NAB.

In addition to analyzing impacts on the full range of natural, biological, and cultural resources, the EIS will examine aesthetic and socioeconomic issues, management practices for California least tern and Western snowy plover nesting habitat avoidance, and management practices for the salt marsh bird's beak.

To facilitate preparation of its EIS, the Navy has initiated this scoping process. The purpose of the scoping process is to identify community concerns and local issues that should be addressed. Federal, state, and local agencies, elected officials, non-governmental organizations, and interested persons are encouraged to attend scheduled scoping meetings and provide comments on the scope of issues to be addressed in the EIS. Scoping comments that clearly describe specific issues or topics are particularly helpful.

All comments not received at the scheduled public meetings must be in writing and must be postmarked by September 14, 2001. Comments should be mailed or faxed to: Southwest Division, Naval Facilities Engineering

Command, Attn: Ms. Jenny Boyd, South Bay Area Focus Team, 2585 Callagan Highway, Building 99, San Diego, CA 92136-5198, fax (619) 556-8929.

Dated: July 30, 2001.

T.J. Welsh,

*Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.*

[FR Doc. 01-19613 Filed 8-3-01; 8:45 am]

BILLING CODE 3810-FF-P

## DEPARTMENT OF ENERGY

### Idaho Operations Office; Emerging Technology Deployment

**AGENCY:** Idaho Operations Office, DOE.  
**ACTION:** Notice of availability of financial assistance solicitation No. DE-PS07-01ID14181.

**SUMMARY:** The U.S. Department of Energy (DOE) Idaho Operations Office (ID) is soliciting the submission of proposals for field testing of technologies to reduce energy consumption, enhance economic competitiveness, and reduce environmental impacts, specifically in the Industries of the Future (IOF) industrial sectors. The objective of the solicitation is to find ways to mitigate the risk to industries of accepting and using emerging technologies developed by the IOF program. It is not the intent of DOE-ID to solicit research and development projects. At least a 50% cost share will be required.

This solicitation is commissioned on behalf of the DOE's Office of Industrial Technology (OIT) BestPractices Program, which has been established to provide integrated delivery of energy-saving products, services, and technologies to the nine IOF sectors. Additional information about the BestPractices Program can be found on the website (<http://www.oit.doe.gov/bestpractices>). The IOF industry-specific vision documents and technology roadmaps are available at <http://www.oit.doe.gov/> under individual IOF program areas.

**DATES:** The deadline for receipt of applications is October 19, 2001. Awards are expected to be made on or about January 15, 2002.

**ADDRESSES:** The solicitation in its full text is available on the Internet at the following URL address: <http://e-center.doe.gov>. All applications must be submitted through the DOE e-center site.

**FOR FURTHER INFORMATION CONTACT:** T. Wade Hillebrant, Contract Specialist, [hillebtw@id.doe.gov](mailto:hillebtw@id.doe.gov).

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# Appendix B

## Description of Vessels



## Appendix B

### Descriptions of Vessels, Vehicles, and Aircraft used at SSTC

TYPE OF EQUIPMENT	DESCRIPTION
<b>MARITIME VESSELS</b>	
Small Insertion/Extraction Vessels	Consists of different types of crafts such as the Combat Rubber Raiding Craft (CRRC), Inflatable Boats (IBS), and Sea Kayak. The CRRC is a 15-foot rubber raft and may be equipped with a small engine. IBS and Kayak boats are propelled by paddling. CRRCs and IBS hold up to 9 crew members.
Support/Transport Vessels	<p>The Mark V Special Operations Craft (Mark V SOC) is an 82-foot vessel used to carry Special Operations Forces (SOF), primarily SEAL combat swimmers, into and out of operations.</p> <p>The Landing Craft, Mechanized and Utility (LCM/LCU) and Maritime Prepositioned Force Utility Boat (MPFUB) are capable of transporting cargo, tracked and/or wheeled vehicles and troops from amphibious assault ships to beachheads or piers. LCUs are 135-foot propeller driven craft that are typically used to land/retrieve personnel and equipment (tanks, artillery, equipment, motor vehicles) during amphibious operations. LCMs have a bow ramp for unload/offload. Holds 14 crew members.</p> <p>Landing Craft, Air Cushioned (LCAC) is an 87-foot high-speed, over-the-beach fully amphibious landing craft, capable of carrying a 60- to 75-ton payload and capable of speeds of more than 40 knots over water. Capable of operating from existing and planned well deck ships, it is used to transport weapons systems, equipment, cargo and personnel from ship to shore and across the beach. The LCAC, like all "hovercraft," rides on a cushion of air. The air is supplied to the cushion by four centrifugal fans driven by the craft's gas turbine engines. The air is enclosed by a flexible skirt system manufactured of rubberized canvas. Holds 5 crew members.</p>
Propeller Driven Crafts	Rigid Hull Inflatable Boats (RHIBs) are 35-foot high-speed, high-buoyancy, extreme-weather craft with the primary mission of SEAL insertion/extraction, which have a rigid hull and inflatable tube gunwale made of reinforced fabric. The rugged, seaworthy, versatile 36-foot RHIB has a 200-nm range at 32 knots, with a 45-knot top speed. It can carry 8 passengers or 3,200-pound payload and 3 crew members.
Water-Jet Driven Craft/Personal Watercraft	The Jet-boat craft that will replace outboard engine RHIB vessels in the future. Small jet-driven vessel (i.e., wave runner) is primarily used for safety support and in the surf zone.
Ship to Shore Logistics Equipment	Causeway Section Powered/Warping Tug and Barge Ferrys make up the main building blocks for the modular causeway section and ELCAS activities. The causeway sections are 24 foot x 80 foot platforms configured from compatible floating pontoons. Causeway sections are assembled to configure three sub-systems: Floating Causeway, Roll On/Roll Off Discharge Facility (RRDF), and Causeway Ferry. The OUB (Offshore Petroleum Discharge System [OPDES] Utility Boat) to support ship to shore transfer of fluids.
Unmanned Underwater Vehicles (UUV)	Self-propelled submersible used in reconnaissance activities for either fully autonomous (programmed) or under minimal supervisory control. Vehicles range from 63-70 inches in length and have a 7.5-inch diameter.

TYPE OF EQUIPMENT	DESCRIPTION
<b>VEHICLES</b>	
Construction/ Excavation Equipment	Bulldozers, forklifts, payloaders, and cranes, used for grading, digging, and transport of equipment.
Amphibious Vehicles	<p>Lighter, Amphibious, Resupply, Cargo-5 ton (LARC V) is a 63-ft aluminum hulled amphibious cargo vehicle capable of transporting 5 tons.</p> <p>The tracked Amphibious Assault Vehicle (AAV) is a 26-ton (23,991-kilograms [kg]) fully combat-loaded vehicle with a 3-man crew. With a road speed of 45 miles per hour (mph), it is also fully amphibious with water speeds up to 8 mph.</p>
Light-Wheeled Vehicles	Consists of light tactical vehicles for command and control, special purpose shelter carriers, and special purpose weapons platforms. Types used include the High Mobility Multipurpose Wheeled Vehicle (HMMWV) or 4-wheeled drive pick-up trucks.
<b>AIRCRAFT</b>	
Helicopters	Helicopters typically used are CH-60, SH-60, MH-60S (proposed), CH-53E, and CH-46E. AH-1W attack and UH-1N may also be used.
Unmanned Aircraft System (UAS)	Small, light, unmanned electric driven crafts that are remotely flown. UASs less than 20 lbs and with a 5 foot wingspan are typically used.

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# Appendix C

## Emissions Calculations



Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Vessels			Ground Vehicles	Vehicles			Aircraft	Aircraft			Ordnance	Number of ordnance possible	Number of ordnance assumed
						Number of vessels possible	Number of vessels assumed	Vessels per year		Number of vehicles possible	Number of vehicles assumed	Vehicles per year		Number of aircraft possible	Number of aircraft assumed	Aircraft per year			
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring	1	72		RHIB	1	1	72	None	0	0	0	None	0	0	0	None	0	0
					Ship (DDG or CG)	1	1	72											
2	Towing	1	30		Foss Tug	1	1	30	None	0	0	0	None	0	0	0	None	0	0
					Ship (DDG or CG)	1	1	30											
3	Moor to Buoy	1	36		RHIB	1	1	36	None	0	0	0	None	0	0	0	None	0	0
					Ship (DDG or CG)	1	1	36											
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations	1	216	10 to 20	RHIBs	2-4	3	648	4WD Pickups	2	432	SH60	1	1	216	Smoke Grenades/Flares		3	
5	MCM Operations	1	32	9	Zodiacs		1	32	4WD Pickups	2	64	None	0	0	0	Blast Caps/ Diver Recalls 10 - 20 lb Underwater Explosives	1	1	
6	Floating Mine Operations	1	25		RHIBs	2	2	50	4WD Pickups	1	1	SH-60 - 2 Hour 1	1	25	Blast Caps/ Diver Recalls Less than or equal to 5 lb	1	1	2 per training	
7	Dive Platoon	1	8		RHIB	2	2	16	None	0	0	SH-60 - 2 Hour 1	1	8	Blast Caps/Explosives 3.5 lb	8	8	9 per training 8 sequential command detonated	
8	Very Shallow Water (VSW) Operator Course	8	4	10	RHIBs / Water-Jet Driven Craft	2	2	8	None	0	0	None	0	0	Diver Recalls	2	2	2 per training	
9	VSW Mine Countermeasure Operations	1	120	10 to 20	RHIBs / Water-Jet Driven Craft	2 to 3	3	360	None	0	0	None	0	0	Diver Recalls	2	2	2 per training	
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations	1	120	5 to 10	RHIBs / Water-Jet Driven Craft Submersible	2-3 2	2 2	240 240	None	0	0	None	0	0	Blast Caps/ Diver Recalls	2	2	2 per training	
11	MK8 Marine Mammal/MMS Operations	1	175	11 to 13	RHIBs / Water-Jet Driven Craft	2 to 4	4	700	4WD Pickups	0	0	None	0	0	13lbs [MK 87/88 C-4 in GRP 29lb [MK86/89 PBXN in AL canister]			Approximately 10% of training involves the setting of a 13- or 29-pound Approximately 10% of training involves the setting of a 13- or 29-pound	
12	Mine Neutralization	1	4	16	RHIBs / Water-Jet Driven Craft	2	8	8	4WD Pickups	2	2	SH-60 - 2 Hour 1	1	4	Blast Caps/ Diver Recalls 3.5lb explosive	8	8	9 per training 8 sequential command detonated	
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure	1	30		Foss Tug	1	1	30	None	0	0	None	0	0	None	0	0		
					RHIB	1	1	30											
					Ship (DDG or CG)	1	1	30											
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling	1	94	28	CRRC	4	4	376	HMMWV	1	1	94	None	0	0	0	None	0	0
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	16	Personal Watercraft / CRRC / RHIB	1	1	189	HMMWV Truck	1 1	1 1	189 189	None	0	0	0	None	0	0
16	Basic Reconnaissance Course Final Mission	1	8	40 (in groups of 6 to 8)	IBS LCU	1 1	1 1	8 8	None	0	0	SH60	1	1	8	None	0	0	
17	Obstacle Course	1	138	8 to 150	None	0	0	0	4WD Pickups	1-3	2	276	None	0	0	0	None	0	0
18	Hydrographic Reconnaissance	1	40	8 to 60	Personal Watercraft Small Water Craft RHIB / CRRC rigid, 10-meter craft	1 1 to 8 1 1	1 8 1 1	40 40 40 40	4WD Pickups	1-4	3	120	None	0	0	0	None	0	0
19	Surf Observations (SUROBS)	1	116	16 to 48	None	0	0	0	4WD Pickups	2	2	232	None	0	0	0	None	0	0
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function	1	72	28 to 60	CRRC/Zodiac/Propeller Surface Craft/RHIB Personal Watercraft	4 to 10 1	6 1	432 72	HMMWV/ 4WD Pickup	1 to 3	2	144	None	0	0	0	None	0	0
21	CRRC Towing and High Speed Maneuver	1	8	28	CRRC Personal Watercraft	4 1	4 1	32 8	4WD Pickups / HMMW1	1	8	None	0	0	0	None	0	0	
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean	1	24	28	CRRC Personal Watercraft RHIB LCU	4 1 1 1	4 1 1 1	96 24 24 24	4WD Pickups / HMMW1	1	24	None	0	0	0	None	0	0	
23	CRRC Navigation, Bay and Ocean Runs	1	26	40	CRRC RHIB	6 1	6 1	156 26	4WD Pickups / HMMW1	1	26	None	0	0	0	None	0	0	
24	Amphibious Raid Course Final Mission	1	24	110-130	LCU CRRCs	2 6-18	2 12	48 288	None	0	0	0	None	0	0	0	None	0	0
25	Amphibious Raid Operations	3	2	150 on foot , 20-40 additional	CRRCs LPD LCUs LCACs Submersibles EFV	10-15 1 1-2 1-2 1-2 4-8	13 1 2 2 2 6	26 2 4 4 4 12	HMMWVs 4WD Pickups AAVs LAVs IFAVs	4-8 5 to 10 4-8 4-8 4-8	6 8 6 6 6	12 16 12 12 12	CH-53E CH-46E UH-1N	2 to 4 4 1	3 4 1 2	6 8 2	Flares Grenades 9MM 5.56MM/38CAL Diver Recalls	3 20 210 60/15 3	

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Vessels			Ground Vehicles	Vehicles			Aircraft	Aircraft			Ordnance	Number of ordnance possible	Number of ordnance assumed
						Number of vessels possible	Number of vessels assumed	Vessels per year		Number of vehicles possible	Number of vehicles assumed	Vehicles per year		Number of aircraft possible	Number of aircraft assumed	Aircraft per year			
26	Direct Action (DA) Operations	3	2	90 on foot, 20-40 additional	CRRCs LPD Submersibles	8-10 1 1-2	9 1 2	18 2 4	Light Wheeled Vehicle: 11 to 20	16	32	CH-46E UH-1N	6 to 8 1	7 1	14 2	Explosives Smoke 9MM 5.56MM/38CAL Diver Recalls Smoke	10 3 137 per year 50/10 per year 3 3		
27	Craft Landing Zone (CLZ)	1	4		1 LCAC per CLZ	1	1	4	HMMWVs	1	1	4	None	0	0	0			
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	52	80 to 20	RHIBs / CRRCs Rigid, 10-meter craft	2 to 4 1	3 1	156 52	4WD Pickups	1-4	3	156	SH-60 Helo	1	1	52	Smokes/Flares/Surface Explosives Small Arms	3 flares, 10 grenades 6600/5000 .5 cal/7.62 mm	
29	Over-the-Beach Stalk	1	16		CRRCs Boston Whaler	1 1	1 1	16 16	4WD Pickups	1	1	16	SH-60 Helo	1	1	16	None		
30	Immediate Action Drills	1	8	Small groups of 8 to 10	RHIBs CRRCs	1 1	1 1	8 8	4WD Pickups	4	4	32	SH-60 Helo	1	1	8	Smokes/Flares/Surface Small Arms	3 flares, 10 grenades 5000 mds 50 cal/7.62 blank	
31	Breacher Training	1	20	12 to 40	None	0		20	4WD Pickups	3	3	60	None	0	0	0	PETN 1.14 0.25 Small Arms - 12gauge	0 0 150 annually	
32	Amphibious Warfare Exercise	1	50		RHIBs MK V	2 2	2 2	100 100	None	0	0	0	None	0	0	0	Smoke Grenades/Flares	3	
33	Mobility Primary Mission Area	1	200		RHIB or MK V	2 to 4	4	800	None	0	0	0	None	0	0	0	Smoke/Flares	3 per group	
34	Escape and Evasion	1	20		RHIBs MK V	2 2	2 2	40 40	None	0	0	0	None	0	0	0	Smoke/Flares	3 per group	
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	124	8 to 50	RHIBs CRRCs	1 1 to 3	1 2	124	4WD Pickups	2 to 4	2	248	SH60 CH46	1 1	1 1	124 124	Smoke Grenades/Flares	3	
36	Rappel and Fast Rope Training	1	6		None	0	0	0	4WD Pickups	4	4	24	NONE	0	0	0	None	0	
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy	14	14	20	RHIBs	2	2	28	4WD Pickups	2	2	28	SH-60		1	14	≤ 10 lbs C-4 (underwater)	1	
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																			
38	OPDS	25	6	25 to 65	OUBs	1-5	2	12	HMMWVs 5-ton truck Dozer Comm Van RTV forklift LARCV	1 1 2 1 1 2	1 1 2 1 1 2	6 6 12 6 6 12	None	0	0	0	None	0	
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	4	65	Warping Tug Barge Ferry	1 2	1 2	4 8	HMMWVs 5-ton truck Van Dozers Rough Terrain Forklift LARCV	1 1 1 2 1 2	1 1 1 2 1 2	4 4 4 8 4 8	None	0	0	0	None	0	
40	Barge Ferry/Causeway Coxswain Training	3	34	up to 36	Barge Ferry	2	2	68	HMMWVs 5-ton truck Van Dozer LARCV	1 1 1 2 2	1 1 1 2 2	34 34 34 68 68	None	0	0	0	None	0	
41	Causeway Pier Insertion and Retraction	5	9	65 to 75	WTs	4	4	36	HMMWVs 5-ton truck Van Rough Terrain Forklift Dozers LARCV	2 1 1 1 2 2	2 1 1 1 2 2	18 9 9 9 18 18	None	0	0	0	None	0	
42	Elevated Causeway System (ELCAS)	10	2	75 to 125	WTs Personal Watercraft LCM	2 2 1	2 2 1	4 4 2	HMMWVs 5-ton truck Light Trucks Dozers Forklifts 75-Ton Crane Pile Driver ambulance water buffalo 140-ton crane 30-ton crane LARCV	3 to 4 1 to 3 4 2 1 2 2 1 1 1 2 2	4 3 4 4 1 2 2 1 1 1 2 2	8 6 8 4 2 4 4 2 2 2 4 4	None	0	0	0	None	0	

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Vessels			Ground Vehicles			Aircraft	Aircraft			Ordnance	Number of ordnance possible	Number of ordnance assumed	
						Number of vessels possible	Number of vessels assumed	Vessels per year	Number of vehicles possible	Number of vehicles assumed	Vehicles per year		Number of aircraft possible	Number of aircraft assumed	Aircraft per year				
43	Establish Beach Party Command Post	4	16	19 on foot	None	2	2	32	Air compressors Pile Extractor HMMWVs 5-ton truck Dozer Generators/various Heaters LARCV	2 1 3 1 1 2 2 2	2 1 3 1 1 2 2 2	4 2 48 16 16 32 32 32	None	0	0	0	5.56 caliber rounds 7.62 caliber blanks	30 100	
44	Sterngate Marriage to Amphibious Ship/LCU	1	40		LCU	2	2	80	None	0	0	0	None	0	0	0	None	0	0
45	LCU/LCM Beaching	1	60		LCU LCM-8	0 to 2 0 to 2	1 1	60 60	HMMWVs 5-ton truck Dozer LARCV	1 1 1 1	60 60 60 60	None	0	0	0	None	0	0	
46	LCU/LCM Towing/Being Towed	1	60		LCU LCM-8	2 2	2 2	120 120	Dozer	1	1	60	None	0	0	0	None	0	0
47	Communications Training	2	1	60 persons, but they work in two shifts	None	0	0	0	4WD Pickups RTVs Bus Tractor with flat bed	4 4 2 1	4 4 2 1	None	0	0	0				
48	Field Training Exercise with a Beach Camp	14	1	19	None	2	2		HMMWVs 5-ton truck Dozer 4WD Pickups Fuel Truck 20-ton Stake Trucks 50-ton Low-bed Trucks Wheeled Loaders Generators/various Heaters Welder LARCV	2 1 2 10 1 1 1 2 23 117 6	2 1 2 10 1 1 1 2 23 117 6	2 1 2 10 1 1 1 2 23 117 6	None	0	0	0	5.56 caliber rounds 7.62 caliber blanks	30 100	
49	Maritime Pre-positioning Ships (MPS) Offload	5	1	72	LCM-8 WTs Barge Ferry	2 2 1	2 2 1		HMMWVs 5-ton truck Dozer 4WD Pickups LARCV	2 1 1 3 1	2 1 1 3 1	None	0	0	0	None	0	0	
50	Reverse Osmosis Water Purification Unit	4	4	6	None	0	0	0	4WD Pickups RTVs Generator Flatbed Truck	2 6 1 1	8 24 4 4	None	0	0	0	None	0	0	
51	Roll-on/Roll-off Discharge Facility	5	1	40	WTs Personal Watercraft	2 2 2	2 2 2		HMMWVs/Jeeps 6-ton truck Dozer Cranes RTVs LARCV	3 1 1 2 2 2	3 1 1 2 2 2	None	0	0	0	None	0	0	
52	MPF Utility Boat Operator Course	9	2	15	MPF Utility Boat	2 2	2 2	4 4	Dozer Van LARCV	1 1 2	2 1 4	None	0	0	0	None	0	0	
53	LARC V Operator Training	6	1	10	None	2	2	2	LARCV	2	2	2	None	0	0	0	None	0	0
<b>4.9.1 Conduct Mission Area Training NSW Diving and Beach Operations</b>																			
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving	1	126		RHIBs	5	5	630	4WD Pickups Bus	3 2	3 2	378 252	None	0	0	0	Diver Recall	1	1
55	Open Circuit Breathing Diving	1	12	60	RHIBs LCU	5 1	5 1	60 12	4WD Pickups Bus	3 2	3 2	36 24	None	0	0	0	Diver Recall	1	1
56	OTB Field Training Exercise	5	36	60	CRRCs	5	5	180	4WD Pickups	3	3	108	None	0	0	0	Small arm		15000 7.62mm; 19800 .5cal ANNUAL
57	Rock Portage	1	18	60	CRRCs IBS	5 to 8 8 to 10	7 9	126 162	4WD Pickups	1	1	18	None	0	0	0	Smoke Grenades/Flares	3	
58	<b>NSW Land Warfare</b> Land Patrolling	1	18	60	None	0	0	0	4WD Pickups	2	2	36	None	0	0	0	None	0	0
59	Immediate Action Drills	1	5	60	None	0	0	0	4WD Pickups	2	2	10	None	0	0	0	50CAL/7.62 BLANK		5000 RNDs per operation (25000 rounds each annually) per type
<b>NSW Advanced Training</b>																			
60	Over the Beach Insertion / Photo Reconnaissance	1	31	20	RHIB/CRRC Kayak	2 1	1 1	31 31	4WD Pickup	2	2	62	None	0	0	0	Small arms/blanks		10 9 mm blanks; 10 5.56 blanks per operation

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Vessels			Ground Vehicles	Vehicles			Aircraft	Aircraft			Ordnance	Number of ordnance possible	Number of ordnance assumed
						Number of vessels possible	Number of vessels assumed	Vessels per year		Number of vehicles possible	Number of vehicles assumed	Vehicles per year		Number of aircraft possible	Number of aircraft assumed	Aircraft per year			
61	Photo Image Capture	14	3	20	None	0	0	0	4WD Pickups	2	2	28	None	0	0	0	Small arms/blanks	10	9 mm blanks; 10 5.56 blanks per operation
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	22	20	None	0	0	0	4WD Pickups	2	2	44	None	0	0	0	Small arms/blanks	10	9 mm blanks; 10 5.56 blanks per operation
63	Stalking, Movement and Hide-Sites	5	8	14	None	0	0	0	4WD Pickups	3	3	24	None	0	0	0	None	0	0
64	CQC/CQD	1	109	580	CRRCs		5		4WD Pickups		5	545	SH-60	1	1	109	Small Arms Small Arms Grenades (flash crash) Explosives (<1lb), accounted for in Breacher Training		57600 9 MM simunition annual; 20000 5.56 simunition annual; 4000 .38 cal 3
65	Communications	5	6	20	None	0	0	0	4WD Pickups	6	6	36	None	0	0	0	None	0	0
66	Unmanned Aerial Vehicle (UAV) Training	5	12	6	None	0	0	0	4WD Pickups	1	1	12	UAV	2	2	24	none	0	0
67	Around the World Training	1	6	60	CRRCs Sea Kayaks	7 5	7 5	42 30	4WD Pickups	4	4	24	None	0	0	0	none	0	0
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals NSW Physical Fitness Training</b>																			
68	Physical Training Runs	1	464	30 to 150 averaging 60	None	0	0	0	4WD Pickups	2-3	3	1392	None	0	0	0	None	0	0
69	Physical Conditioning Training Exercise	1	280	60 to 150 (avg 60)	CRRCs / Propeller Surface Craft	2-4	3	840	4WD Pickups	2	2	560	None	0	0	0	None	0	0
70	Swim Training	1	170	48-60	RHIBs	5	5	850	4WD Pickups	1	1	170	None	0	0	0	None	0	0
71	Hell Week	5	6	60	CRRCs	5	5	30	4WD Pickups	3	3	18	None	0	0	0	Smokes Grenade Simulators White Para Flares 7.62 Blank (A111) 50 CAL Blank	128 per year 200 per year 12 per year 27000 per year 2000 per year	
72	Rucksack March	1	54	60	None	0	0	0	4WD Pickups	2-3	3	162	None	0	0	0	None	0	0
73	Monster Mash	1	6	60	CRRCs		3	18	4WD Pickups	3	3	18	None	0	0	0	None	0	0
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																			
74	Conduct Environmental Health Site Assessment	3	3	14	None	0	0	0	4WD Pickups 5-ton truck 3/4-ton trailer small trailers	4 1 1 3	4 1 1 3	12 3 3 9	None	0	0	0	None	0	0
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																			
75	Conventional Ordnance/Improvised Explosive Device Response	1	64	9	None	0	0	0	4WD Pickups	2	2	128	None	0	0	0			
76	Land Mine Detection/Neutralization	1	24	8 to 10	None	0	0	0	4WD Pickups / Vans	2	2	48	None	0	0	0			
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																			
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	50-1000	Boston Whalers	0 to 24	12	144	4WD Pickups Generators Forklift	7 to 85 3 to 16 8	140 176 8	None	0	0	0	0.50 cal blanks Grenades/flares M16 Rounds M60 Rounds 9mm Rounds	15650 per year 66 per year 8250 per year 8250 per year 6600 per year		
<b>6.3.3 Combat Terrorism</b>																			
78	Small Boat Attack	1	30		Boston Whalers surface vessel dropping anchor and 3 shots 18' Bayliner	1 1 1	1 1 1	30 30 30	None	0	0	0	None	0	0	0	.50 cal rounds	350	350 per exercise
Totals		3937						10138				8126				764			

(a) Days = the number of days per operation  
(b) Operations = the number of operations per year

Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Emissions Factors (lb/operation) (c)					Emissions (lbs)										
								Hours	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM					
<b>1.1.2 Conduct Maneuver - Move Forces</b>																							
1	Anchoring		1	72	None	0																	
2	Towing		1	30	None	0																	
3	Moor to Buoy		1	36	None	0																	
<b>1.3.1 Perform Mine Countermeasures</b>																							
4	Parachute Operations		1	216	SH60	1	1.0	7.50	7.68	0.66	0.48	5.04	1620	1658.88	142.56	103.68	1088.64						
5	MCM Operations		1	32	None	0																	
6	Floating Mine Operations		1	25	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	375	384	33	24	252						
7	Dive Platoon		1	8	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	120	122.88	10.56	7.68	80.64						
8	Very Shallow Water (VSW) Operator Course		8	4	None	0																	
9	VSW Mine Countermeasure Operations		1	120	None	0																	
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations		1	120	None	0																	
11	MK8 Marine Mammal/MMS Operations		1	175	None	0																	
12	Mine Neutralization		1	4	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	60	61.44	5.28	3.84	40.32						
<b>1.4.6 Conduct Maritime Interception</b>																							
13	Visit, Board, Search and Seizure		1	30	None	0																	
<b>1.5.4 Conduct Amphibious Operations</b>																							
14	Small Boat Handling		1	94	None	0																	
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None	0																	
16	Basic Reconnaissance Course Final Mission		1	8	SH60	1	4.0	7.50	7.68	0.66	0.48	5.04	240	245.76	21.12	15.36	161.28						
17	Obstacle Course		1	138	None	0																	
18	Hydrographic Reconnaissance		1	40	None	0																	
19	Surf Observations (SUROBS)		1	116	None	0																	
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function		1	72	None	0																	
21	CRRC Towing and High Speed Maneuver		1	8	None	0																	
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean		1	24	None	0																	
23	CRRC Navigation, Bay and Ocean Runs		1	26	None	0																	
24	Amphibious Raid Course Final Mission		1	24	None	0																	
25	Amphibious Raid Operations		3	2	CH-53E	3	4.0	9.51	36.07	0.67	1.79	9.87	228.24	865.68	16.08	42.96	236.88						
					CH-46E	4	4.0	22.109	4.41	3.84	0.45	1.99	707.488	141.12	122.88	14.4	63.68						
					CH-53E T&G	3	1.0	0.77	2.11	0.13	0.11	0.61	4.62	12.66	0.78	0.66	3.66						
					CH-46E T&G	4	1.0	1.85	0.4	0.34	0.04	0.19	14.8	3.2	2.72	0.32	1.52						
					UH-1N	1	4.0	0.7	4.01	0.09	0.28	2.91	5.6	32.08	0.72	2.24	23.28						
26	Direct Action (DA) Operations		3	2	CH-46E	7	4.0	22.109	4.41	3.84	0.45	1.99	1238.104	246.96	215.04	25.2	111.44						
					UH-1N	1	4.0	0.7	4.01	0.09	0.28	2.91	5.6	32.08	0.72	2.24	23.28						
27	Craft Landing Zone (CLZ)		1	4	None	0																	
<b>1.5.7 Conduct Naval Special Warfare</b>																							
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	52	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	1560	1597.44	137.28	99.84	1048.32						
29	Over-the-Beach Stalk		1	16	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	120	122.88	10.56	7.68	80.64						
30	Immediate Action Drills		1	8	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	60	61.44	5.28	3.84	40.32						
31	Breacher Training		1	20	None	0																	
32	Amphibious Warfare Exercise		1	50	None	0																	
33	Mobility Primary Mission Area		1	200	None	0																	
34	Escape and Evasion		1	20	None	0																	
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																							
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	SH60	1	1.0	0.81	1.03	0.08	0.06	0.64	100.44	127.72	9.92	7.44	79.36						
			1	124	CH46	1	1.0	1.87	0.39	0.35	0.04	0.19	231.88	48.36	43.4	4.96	23.56						
36	Rappel and Fast Rope Training		1	6	NONE	0																	
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy		14	14	SH-60	1	1.0	7.50	7.68	0.66	0.48	5.04	1470	1505.28	129.36	94.08	987.84						
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																							
38	OPDS		25	6	None	0																	
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	None	0																	
40	Barge Ferry/Causeway Coxswain Training		3	34	None	0																	
41	Causeway Pier Insertion and Retraction		5	9	None	0																	
42	Elevated Causeway System (ELCAS)		10	2	None	0																	
43	Establish Beach Party Command Post		4	16	None	0																	
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0																	
45	LCU/LCM Beaching		1	60	None	0																	
46	LCU/LCM Towing/Being Towed		1	60	None	0																	
47	Communications Training		2	1	None	0																	
48	Field Training Exercise with a Beach Camp		14	1	None	0																	
49	Maritime Pre-positioning Ships (MPS) Offload		5	1	None	0																	
50	Reverse Osmosis Water Purification Unit		4	4	None	0																	

Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Emissions Factors (lb/operation) (c)					Emissions (lbs)						
								Hours	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
51	Roll-on/Roll-off Discharge Facility		5	1	None	0													
52	MPF Utility Boat Operator Course		9	2	None	0													
53	LARC V Operator Training		6	1	None	0													
<b>4.9.1 Conduct Mission Area Training</b>																			
<b>NSW Diving and Beach Operations</b>																			
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving		1	126	None	0													
55	Open Circuit Breathing Diving		1	12	None	0													
56	OTB Field Training Exercise		5	36	None	0													
57	Rock Portage		1	18	None	0													
<b>NSW Land Warfare</b>																			
58	Land Patrolling		1	18	None	0													
59	Immediate Action Drills		1	5	None	0													
<b>NSW Advanced Training</b>																			
60	Over the Beach Insertion / Photo Reconnaissance		1	31	None	0													
61	Photo Image Capture		14	3	None	0													
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	22	None	0													
63	Stalking, Movement and Hide-Sites		5	8	None	0													
64	CQC/CQD		1	109	SH-60	1	3.0	7.5	7.68	0.66	0.48	5.04	3793.2	2881.96	368.42	189.66	1898.78		
65	Communications		5	6	None	0													
66	Unmanned Aerial Vehicle (UAV) Training		5	12	UAV	2													
67	Around the World Training		1	6	None	0													
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals</b>																			
<b>NSW Physical Fitness Training</b>																			
68	Physical Training Runs		1	464	None	0													
69	Physical Conditioning Training Exercise		1	280	None	0													
70	Swim Training		1	170	None	0													
71	Hell Week		5	6	None	0													
72	Rucksack March		1	54	None	0													
73	Monster Mash		1	6	None	0													
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																			
74	Conduct Environmental Health Site Assessment		3	3	None	0													
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																			
75	Conventional Ordnance/Improvised Explosive Device Response		1	64	None	0													
76	Land Mine Detection/Neutralization		1	24	None	0													
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																			
77	Field Training Exercise (FTX) e.g. SEAHAWK		14	53	None	0													
<b>6.3.3 Combat Terrorism</b>																			
78	Small Boat Attack		1	30	None	0													

pounds/year 11954.972 10151.82 1275.68 650.08 6245.44

tons/year 5.98 5.08 0.64 0.33 3.12

Assumptions: Assume that SH-60 and CH-46 operation for Cast and Recovery are Special Personnel Insertion and Extraction Rig operations.

Assume 4 hours of cruise time for Amphibious Raid Operations, and one touch and go operation

SH60 from AESO Memorandum Report No. 9929, February 1999

CH53 from AESO Memorandum Report No. 9822 Rev C, February 2000

CH46 from AESO Memorandum Report No. 9816 Rev F, January 2001

UH1N from AESO Memorandum Report No. 9904 Rev A, May 1999

AH-1W from AESO Memorandum Report No. 9824 Rev A, April 1999

Assume Aircraft participate for one day during Amphibious Raid Operations and Direct Action Operations

Assume 1 LTO and 3 hours of cruise for CQC/CQD SH-60 operation.

(a) Days = the number of days per operation

(b) Operations = the number of operations per year

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)			Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)				
							Hours	Propulsion	No.	Generator	No.	CO	NOx					ROG	SOx	PM10	CO	Nox	ROG	Sox	PM		
<b>1.1.2 Conduct Maneuver - Move Forces</b>																											
1	Anchoring	1	72	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	11.52	457.92	2.88	48.96	5.76			
		1	72	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	102.98	47.34	8.10	17.04	2.35	29658.24	13633.92	2332.8	4907.52	676.8			
2	Towing	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	221.44713	1306.538	166.0853	3930.686	788.9054			
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	102.98	47.34	8.10	17.04	2.35	12357.6	5680.8	972	2044.8	282			
3	Moor to Buoy	1	36	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	5.76	228.96	1.44	24.48	2.88			
		1	36	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	102.98	47.34	8.10	17.04	2.35	14829.12	6816.96	1166.4	2453.76	338.4			
<b>1.3.1 Perform Mine Countermeasures</b>																											
4	Parachute Operations	1	216	RHIBs	3	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	103.68	4121.28	25.92	440.64	51.84			
5	MCM Operations	1	32	Zodiacs	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	1149.7679	110.0412	659.0057	0.279371	158.031			
6	Floating Mine Operations	1	25	RHIBs	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	8	318	2	34	4			
7	Dive Platoon	1	8	RHIB	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	2.56	101.76	0.64	10.88	1.28			
8	Very Shallow Water (VSW) Operator Course	8	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	5.12	203.52	1.28	21.76	2.56			
9	VSW Mine Countermeasure Operations	1	120	RHIBs / Water-Jet Driven Craft	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	28.8	1144.8	7.2	122.4	14.4			
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio	1	120	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	19.2	763.2	4.8	81.6	9.6			
		1	120	Submersible	2	2																					
11	MK8 Marine Mammal/MMS Operations	1	175	RHIBs / Water-Jet Driven Craft	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	56	2226	14	238	28			
12	Mine Neutralization	1	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	0.64	25.44	0.16	2.72	0.32			
<b>1.4.6 Conduct Maritime Interception</b>																											
13	Visit, Board, Search and Seizure	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	221.44713	1306.538	166.0853	3930.686	788.9054			
		1	30	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	4.8	190.8	1.2	20.4	2.4			
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	102.98	47.34	8.10	17.04	2.35	12357.6	5680.8	972	2044.8	282			
<b>1.5.4 Conduct Amphibious Operations</b>																											
14	Small Boat Handling	1	94	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	20264.658	1939.477	11614.98	4.923918	2785.296			
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	Personal Watercraft / CRRC / RHIB	1	1	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	4938.7755	472.6771	2830.729	1.200026	678.815			
16	Basic Reconnaissance Course Final Mission	1	8	IBS	1	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	431.16294	41.26546	247.1271	0.104764	59.26162			
		1	8	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	1738.08	2157.6	24.96	149.28	75.36			
17	Obstacle Course	1	138	None																							
18	Hydrographic Reconnaissance	1	40	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	6271.461	600.2249	3594.577	1.523843	861.9873			
		1	40	Small Water Craft	8	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	17246.518	1650.618	9885.086	4.190569	2370.465			
		1	40	RHIB / CRRC	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	9.6	381.6	2.4	40.8	4.8			
		1	40	rigid, 10-meter craft	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	9.6	381.6	2.4	40.8	4.8			
19	Surf Observations (SUROBS)	1	116	None																							
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ	1	72	CRRC/Zodiac/Propeller Surface Craft/RT	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	23282.799	2228.335	13344.87	5.657268	3200.128			
		1	72	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	11288.63	1080.405	6470.238	2.742918	1551.577			
21	CRRC Towing and High Speed Maneuver	1	8	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	1724.6518	165.0618	988.5086	0.419057	237.0465			
		1	8	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	1254.2922	120.045	718.9153	0.304769	172.3975			
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay :	1	24	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	5173.9553	495.1855	2965.526	1.257171	711.1395			
		1	24	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	3762.8766	360.1349	2156.746	0.914306	517.1924			
		1	24	RHIB	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	5.76	228.96	1.44	24.48	2.88			

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)										
							Hours	Propulsion		Generator					CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM						
								No.	No.	No.															No.					
23	CRRC Navigation, Bay and Ocean Runs	1	24	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	5214.24	6472.8	74.88	447.84	226.08						
		1	26	CRRC	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	8407.6774	804.6765	4818.979	2.042902	1155.602						
24	Amphibious Raid Course Final Mission	1	26	RHIB	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	6.24	248.04	1.56	26.52	3.12						
		1	24	LCU	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	3476.16	4315.2	49.92	298.56	150.72						
25	Amphibious Raid Operations	1	24	CRRCs	12	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	5173.9553	495.1855	2965.526	1.257171	711.1395						
		3	2	CRRCs	13	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	467.09319	44.70425	267.7211	0.113495	64.20009						
		3	2	LPD	1	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	7.3815708	43.55127	5.536178	131.0229	26.29685						
		3	2	LCUs	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	289.68	359.6	4.16	24.88	12.56						
26	Direct Action (DA) Operations	3	2	EFV	6	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	25.41	55.32	0.72	43.30	3.89	203.28	442.56	5.76	346.4	31.12						
		3	2	CRRCs	9	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	2.0611	4.17	0.72	0.06	0.3211	49.4664	100.008	17.3064	1.5168	7.7064						
		3	2	LPD	1	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	323.37221	30.94909	185.3454	0.078573	44.44622						
27	Craft Landing Zone (CLZ)	1	4	1 LCAC per CLZ	1	2	Foster Wheeler/Babcock & Wilcox Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	1.85	10.89	1.38	32.76	6.57	7.3815708	43.55127	5.536178	131.0229	26.29685						
<b>1.5.7 Conduct Naval Special Warfare</b>																														
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	52	RHIBs / CRRCs	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	49.92	1984.32	12.48	212.16	24.96						
		4	52	Rigid, 10-meter craft	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	16.64	661.44	4.16	70.72	8.32						
29	Over-the-Beach Stalk	1	16	CRRCs	1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	287.44196	27.51031	164.7514	0.069843	39.50775						
		1	16	Boston Whaler	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	287.44196	27.51031	164.7514	0.069843	39.50775						
30	Immediate Action Drills	1	8	RHIBs	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	0.64	25.44	0.16	2.72	0.32						
		1	8	CRRCs	1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	143.72098	13.75515	82.37571	0.034921	19.75387						
31	Breacher Training	1	20	None	0																									
32	Amphibious Warfare Exercise	1	50	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	8	318	2	34	4						
		1	50	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	1.94	14.83	0.50	2.39	0.20	388	2966	100	478	40						
33	Mobility Primary Mission Area	1	200	RHIB or MK V	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	64	2544	16	272	32						
34	Escape and Evasion	1	20	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	3.2	127.2	0.8	13.6	1.6						
		1	20	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	1.94	14.83	0.50	2.39	0.20	155.2	1186.4	40	191.2	16						
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																														
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	124	RHIBs	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	9.92	394.32	2.48	42.16	4.96						
		1	124	CRRCs	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	4455.3504	426.4098	2553.647	1.082564	612.3701						
36	Rappel and Fast Rope Training	1	6	None																										
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASD)	14	14	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	31.36	1246.56	7.84	133.28	15.68						
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																														
38	OPDS	25	6	OUBs	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	43452	53940	624	3732	1884						
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	4	Warping Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	295.26283	1742.051	221.4471	5240.915	1051.874						
		10	4	Barge Ferry	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	590.52567	3484.101	442.8943	10481.83	2103.748						
40	Barge Ferry/Causeway Coxswain Training	3	34	Barge Ferry	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	1505.8405	8884.459	1129.38	26728.67	5364.557						
41	Causeway Pier Insertion and Retraction	5	9	WTs	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	1328.6828	7839.228	996.5121	23584.12	4733.432						
42	Elevated Causeway System (ELCAS)	10	2	WTs	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	295.26283	1742.051	221.4471	5240.915	1051.874						
		10	2	Personal Watercraft	2	4	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	4180.974	400.1499	2396.384	1.015895	574.6582						

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)		Engines and Generators		Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)							
							Hours	No.	Propulsion	No.					Generator	No.	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
			10	2	LCM	1	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	2896.8	3596	41.6	248.8	125.6	
43	Establish Beach Party Command Post		4	16	None																						
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	LCU	2	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	11587.2	14384	166.4	995.2	502.4	
45	LCU/LCM Beaching		1	60	LCU	1	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	8690.4	10788	124.8	746.4	376.8	
			1	60	LCM-8	1	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	8690.4	10788	124.8	746.4	376.8	
46	LCU/LCM Towing/Being Towed		1	60	LCU	2	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	17380.8	21576	249.6	1492.8	753.6	
			1	60	LCM-8	2	4		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	17380.8	21576	249.6	1492.8	753.6	
47	Communications Training		2	1	None		2		GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	724.2	899	10.4	62.2	31.4	
48	Field Training Exercise with a Beach Camp		14	1	None		2		Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	36.907854	217.7563	27.68089	655.1144	131.4842	
49	Maritime Pre-positioning Ships (MPS) Offload		5	1	LCM-8		2		Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	36.907854	217.7563	27.68089	655.1144	131.4842	
50	Reverse Osmosis Water Purification Unit		4	4	None		2		Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	36.907854	217.7563	27.68089	655.1144	131.4842	
51	Roll-on/Roll-off Discharge Facility		5	1	WTs		2		Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	36.907854	217.7563	27.68089	655.1144	131.4842	
			5	1	Personal Watercraft		2		Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	522.62175	50.01874	299.5481	0.126987	71.83227	
52	MPF Utility Boat Operator Course		9	2	MPF Utility Boat		4		Diesel Engines	2	None	0	2	660	2	NA	20.46	4.4088	1.659306	1.353	1.452	2946.24	634.8672	238.9401	194.832	209.088	
53	LARC V Operator Training		6	1	None		4																				
<b>4.9.1 Conduct Mission Area Training</b>																											
<b>NSW Diving and Beach Operations</b>																											
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divir 1			126	RHIBs	5	2		Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	50.4	2003.4	12.6	214.2	25.2	
55	Open Circuit Breathing Diving		1	12	RHIBs	5	2		Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	4.8	190.8	1.2	20.4	2.4	
					LCU	1																					
56	OTB Field Training Exercise		5	36	CRRCs	5	2		assume paddling																		
57	Rock Portage		1	18	CRRCs	7	2		assume paddling																		
			1	18	IBS	9	2		OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	2910.3499	278.5419	1668.108	0.707158	400.016	
<b>NSW Land Warfare</b>																											
58	Land Patrolling		1	18	None																						
59	Immediate Action Drills		1	5	None																						
<b>NSW Advanced Training</b>																											
60	Over the Beach Insertion / Photo Reconnaissance		1	31	RHIB/CRRC	1	2		Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	2.48	98.58	0.62	10.54	1.24	
			1	31	Kayak	1	2		assume paddling																		
61	Photo Image Capture		14	3	None																						
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	22	None																						
63	Stalking, Movement and Hide-Sites		5	8	None																						
64	CQC/CQD		1	109	CRRCs	5	2		OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	9790.9919	937.0698	5611.845	2.379021	1345.733	
65	Communications		5	6	None																						
66	Unmanned Aerial Vehicle (UAV) Training		5	12	None																						
67	Around the World Training		1	6	CRRCs	7	2		assume paddling																		
			1	6	Sea Kayaks	5	2		assume paddling																		
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and NSW Physical Fitness Training</b>																											
68	Physical Training Runs		1	464	None																						
69	Physical Conditioning Training Exercise		1	280	CRRCs / Propeller Surface Craft	3	2		assume paddling																		
70	Swim Training		1	170	RHIBs	5	2		assume paddling																		
71	Hell Week		5	6	CRRCs	5	2		OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	2694.7684	257.9091	1544.545	0.654776	370.3851	
72	Rucksack March		1	54	None																						
73	Monster Mash		1	6	CRRCs	3	2		OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	323.37221	30.94909	185.3454	0.078573	44.44622	
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																											
74	Conduct Environmental Health Site Assessment		3	3	None																						
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																											
75	Conventional Ordnance/Improvised Explosive Device Response		1	64	None																						
76	Land Mine Detection/Neutralization		1	24	None																						

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)					
						Hours	Propulsion	No.	Generator					No.	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>	77	14	53	Boston Whalers	144	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	2586.9777	247.5928	1482.763	0.628585	355.5697
<b>6.3.3 Combat Terrorism</b>	78	1	30	Boston Whalers	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	538.95368	51.58182	308.9089	0.130955	74.07703
		1	30	surface vessel dropping anchor and 3 sh	1	2																		
		1	30	18' Bayliner	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	538.95368	51.58182	308.9089	0.130955	74.07703

lbs/year 340194.947 249537.92 91649.466 107049.94 43073.474

Assume marine vessels participate for one day during Amphibious Raid Operations and Direct Action Operations and Seahawk  
Assumptions: Watercraft operates 8 hours per day for the days during which the operation occurs

tons/year 170.10 124.77 45.82 53.52 21.54

Table C-4  
Ground Vehicle Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)				
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring		1	72	None														
2	Towing		1	30	None														
3	Moor to Buoy		1	36	None														
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations		1	216	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	174.53	14.60	10.45	0.20	0.89
5	MCM Operations		1	32	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	25.86	2.16	1.55	0.03	0.13
6	Floating Mine Operations		1	25	4WD Pickups	1		2		0.20	0.02	0.01	0.00	0.00	10.10	0.85	0.61	0.01	0.05
7	Dive Platoon		1	8	None														
8	Very Shallow Water (VSW) Operator Course		8	4	None														
9	VSW Mine Countermeasure Operations		1	120	None														
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio		1	120	None														
11	MK8 Marine Mammal/MMS Operations		1	175	4WD Pickups	0		2		0.20	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Mine Neutralization		1	4	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure		1	30	None														
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling		1	94	HMMWV	1	65%	3		0.18	2.06	0.60	0.19	0.17	33.88	378.24	110.32	35.07	31.52
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	HMMWV	1	65%	3		0.18	2.06	0.60	0.19	0.17	68.13	760.51	221.82	70.51	63.38
			1	189	Truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	37.08	45.03	3.20	0.07	2.16
16	Basic Reconnaissance Course Final Mission		1	8	None														
17	Obstacle Course		1	138	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	111.50	9.33	6.68	0.13	0.57
18	Hydrographic Reconnaissance		1	40	4WD Pickups	3		2		0.20	0.02	0.01	0.00	0.00	48.48	4.06	2.90	0.06	0.25
19	Surf Observations (SUROBS)		1	116	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	93.73	7.84	5.61	0.11	0.48
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ		1	72	HMMWV/ 4WD P	2	65%	3		0.18	2.06	0.60	0.19	0.17	51.91	579.44	169.00	53.72	48.29
21	CRRC Towing and High Speed Maneuver		1	8	4WD Pickups / H	1		2		0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay :		1	24	4WD Pickups / H	1		2		0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05
23	CRRC Navigation, Bay and Ocean Runs		1	26	4WD Pickups / H	1		8		0.20	0.02	0.01	0.00	0.00	42.02	3.52	2.52	0.05	0.21
24	Amphibious Raid Course Final Mission		1	24	None	0													
25	Amphibious Raid Operations		3	2	HMMWVs	6	65%	3		0.18	2.06	0.60	0.19	0.17	12.98	144.86	42.25	13.43	12.07
			3	2	4WD Pickups	8		8		0.20	0.02	0.01	0.00	0.00	77.57	6.49	4.65	0.09	0.39
			3	2	AAVs	6		2		0.444918	1.0	0.2	0.1	0.2	32.03	74.60	12.53	3.71	12.90
			3	2	LAVs	6	65%	2		0.04	0.06	0.01	0.00	0.01	2.07	3.03	0.40	0.01	0.28
			3	2	IFAVs	6	65%	2		0.04	0.06	0.01	0.00	0.01	2.07	3.03	0.40	0.01	0.28
26	Direct Action (DA) Operations		3	2	Light Wheeled V	16		2		0.20	0.02	0.01	0.00	0.00	38.78	3.24	2.32	0.04	0.20
27	Craft Landing Zone (CLZ)		1	4	HMMWVs	1	65%	3		0.18	2.06	0.60	0.19	0.17	1.44	16.10	4.69	1.49	1.34
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	52	4WD Pickups	3		2		0.20	0.02	0.01	0.00	0.00	252.10	21.09	15.10	0.29	1.28
29	Over-the-Beach Stalk		1	16	4WD Pickups	1		2		0.20	0.02	0.01	0.00	0.00	6.46	0.54	0.39	0.01	0.03
30	Immediate Action Drills		1	8	4WD Pickups	4		2		0.20	0.02	0.01	0.00	0.00	12.93	1.08	0.77	0.01	0.07
31	Breacher Training		1	20	4WD Pickups	3		2		0.20	0.02	0.01	0.00	0.00	24.24	2.03	1.45	0.03	0.12
32	Amphibious Warfare Exercise		1	50	None	0													
33	Mobility Primary Mission Area		1	200	None	0													
34	Escape and Evasion		1	20	None	0													
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	100.19	8.38	6.00	0.11	0.51
36	Rappel and Fast Rope Training		1	6	4WD Pickups	4		2		0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05

Table C-4  
Ground Vehicle Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)				
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (AS14)		14		4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	158.37	13.25	9.49	0.18	0.80
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																			
38	OPDS		25	6	HMMWVs	1	65%	3		0.18	2.06	0.60	0.19	0.17	54.07	603.58	176.04	55.96	50.30
			25	6	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	29.43	35.74	2.54	0.06	1.72
			25	6	Dozer	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	1955.47	6211.06	696.78	4.50	368.62
			25	6	Comm Van	1		8		0.20	0.02	0.01	0.00	0.00	242.40	20.28	14.52	0.28	1.23
			25	6	RTV forklift	1	48%	8	93.0	0.01	0.02	0.00	0.00	0.00	483.83	882.35	149.59	0.82	80.64
			25	6	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	6510.00	1402.80	527.96	430.50	462.00
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	HMMWVs	1	65%	3		0.18	2.06	0.60	0.19	0.17	14.42	160.96	46.95	14.92	13.41
			10	4	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	7.85	9.53	0.68	0.01	0.46
			10	4	Van	1		8		0.20	0.02	0.01	0.00	0.00	64.64	5.41	3.87	0.07	0.33
			10	4	Dozers	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	521.46	1656.28	185.81	1.20	98.30
			10	4	Rough Terrain F	1	48%	8	37.0	0.01	0.02	0.00	0.00	0.00	51.87	94.60	16.04	0.09	8.65
			10	4	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	1736.00	374.08	140.79	114.80	123.20
40	Barge Ferry/Causeway Coxswain Training		3	34	HMMWVs	1	65%	3		0.18	2.06	0.60	0.19	0.17	36.77	410.44	119.71	38.05	34.20
			3	34	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	20.01	24.30	1.72	0.04	1.17
			3	34	Van	1		8		0.20	0.02	0.01	0.00	0.00	164.83	13.79	9.87	0.19	0.84
			3	34	Dozer	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	1329.72	4223.52	473.81	3.06	250.66
			3	34	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	4426.80	953.90	359.01	292.74	314.16
41	Causeway Pier Insertion and Retraction		5	9	HMMWVs	2	65%	3		0.18	2.06	0.60	0.19	0.17	32.44	362.15	105.63	33.57	30.18
			5	9	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	8.83	10.72	0.76	0.02	0.51
			5	9	Van	1		8		0.20	0.02	0.01	0.00	0.00	72.72	6.08	4.36	0.08	0.37
			5	9	Rough Terrain F	1	48%	8	37.0	0.01	0.02	0.00	0.00	0.00	58.36	106.42	18.04	0.10	9.73
			5	9	Dozers	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	586.64	1863.32	209.03	1.35	110.59
			5	9	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	1953.00	420.84	158.39	129.15	138.60
42	Elevated Causeway System (ELCAS)		10	2	HMMWVs	4	65%	3		0.18	2.06	0.60	0.19	0.17	28.84	321.91	93.89	29.84	26.83
			10	2	5-ton truck	3	80%	1		0.25	0.30	0.02	0.00	0.01	11.77	14.29	1.01	0.02	0.69
			10	2	Light Trucks	4	62%	8	161.0	0.01	0.02	0.00	0.00	0.00	491.54	971.81	139.43	127.77	97.18
			10	2	Dozers	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	260.73	828.14	92.90	0.60	49.15
			10	2	Forklifts	1	48%	8	37.0	0.01	0.02	0.00	0.00	0.00	25.94	47.30	8.02	0.04	4.32
			10	2	75-Ton Crane	2	74%	8	194.0	0.00	0.02	0.00	0.00	0.00	198.51	711.99	70.90	0.61	27.35
			10	2	Pile Driver	2	30%	24	20.0	0.01	0.01	0.00	0.00	0.00	34.29	52.06	18.41	11.52	7.62
			10	2	ambulance	1		8		0.20	0.02	0.01	0.00	0.00	32.32	2.70	1.94	0.04	0.16
			10	2	water buffalo	1	80%	1		0.25	0.30	0.02	0.00	0.01	3.92	4.76	0.34	0.01	0.23
			10	2	140-ton crane	1	74%	8	399.0	0.00	0.02	0.00	0.00	0.00	204.13	732.18	72.91	0.62	28.12
			10	2	30-ton crane	2	74%	8	194.0	0.00	0.02	0.00	0.00	0.00	198.51	711.99	70.90	0.61	27.35
			10	2	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	868.00	187.04	70.39	57.40	61.60
			10	2	Air compressors	2	48%	8	106.0	0.01	0.02	0.00	0.00	0.00	146.45	278.54	47.38	0.25	24.62
			10	2	Pile Extractor	1	30%	24	20.0	0.01	0.01	0.00	0.00	0.00	17.14	26.03	9.21	5.76	3.81
43	Establish Beach Party Command Post		4	16	HMMWVs	3	65%	3		0.18	2.06	0.60	0.19	0.17	69.21	772.58	225.34	71.63	64.38
			4	16	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	12.55	15.25	1.08	0.02	0.73
			4	16	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	417.17	1325.03	148.65	0.96	78.64
			4	16	Generators/vario	2	30%	24	Various	11.98	55.59	4.52	3.67	3.93	5519.25	25617.23	2084.62	1689.14	1809.07
			4	16	Heaters	2	51%	8	238.0	0.00	0.02	0.00	0.00	0.00	463.10	1866.08	172.63	1.64	64.67
			4	16	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	2777.60	598.53	225.26	183.68	197.12
44	Sterngate Marriage to Amphibious Ship/LCU		1	60	None	0													
45	LCU/LCM Beaching		1	60	HMMWVs	1	65%	3		0.18	2.06	0.60	0.19	0.17	21.63	241.43	70.42	22.38	20.12
			1	60	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	11.77	14.29	1.01	0.02	0.69
			1	60	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	391.09	1242.21	139.36	0.90	73.72
			1	60	LARCV	1		2	350.0	10.85	2.338	0.879935	0.7175	0.77	1302.00	280.56	105.59	86.10	92.40
46	LCU/LCM Towing/Being Towed		1	60	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	391.09	1242.21	139.36	0.90	73.72

Table C-4  
Ground Vehicle Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)				
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
47	Communications Training	2	1	4WD Pickups	4			2		0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
		2	1	RTVs	4	48%	8	93.0	0.01	0.02	0.00	0.00	0.00	21.75	43.01	6.17	5.65	4.30	
		2	1	Bus	2		2		0.21	0.74	0.04	0.00	0.02	1.64	5.92	0.33	0.01	0.13	
		2	1	Tractor with flat tire	1	80%	1		0.25	0.30	0.02	0.00	0.01	0.39	0.48	0.03	0.00	0.02	
48	Field Training Exercise with a Beach Camp	14	1	HMMWVs	2	65%	3		0.18	2.06	0.60	0.19	0.17	10.09	112.67	32.86	10.45	9.39	
		14	1	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	2.75	3.34	0.24	0.01	0.16	
		14	1	Dozer	2	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	182.51	579.70	65.03	0.42	34.40	
		14	1	4WD Pickups	10		2		0.20	0.02	0.01	0.00	0.00	56.56	4.73	3.39	0.06	0.29	
		14	1	Fuel Truck	1		2		0.20	0.02	0.01	0.00	0.00	5.66	0.47	0.34	0.01	0.03	
		14	1	20-ton Stake Truck	1		2		0.10	0.46	0.02	0.01	0.02	2.88	12.82	0.50	0.17	0.52	
		14	1	50-ton Low-bed Truck	1		2		0.10	0.46	0.02	0.01	0.02	2.88	12.82	0.50	0.17	0.52	
		14	1	Wheeled Loader	2	47%	8	147.0	0.01	0.02	0.00	0.00	0.00	115.11	235.28	30.04	0.20	13.23	
		14	1	Generators/variou	23	30%	24	Various	11.98	55.59	4.52	3.67	3.93	1207.34	5603.77	456.01	369.50	395.73	
		14	1	Heaters	117	51%	8	238.0	0.00	0.02	0.00	0.00	0.00	5926.17	23880.02	2209.16	21.04	827.56	
49	Maritime Pre-positioning Ships (MPS) Offload	14	1	Welder	6	45%	8	45.0	0.01	0.01	0.01	0.00	0.00	201.60	181.80	85.80	0.21	19.86	
		14	1	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	607.60	130.93	49.28	40.18	43.12	
		5	1	HMMWVs	2	65%	3		0.18	2.06	0.60	0.19	0.17	3.60	40.24	11.74	3.73	3.35	
		5	1	5-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	0.98	1.19	0.08	0.00	0.06	
		5	1	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	32.59	103.52	11.61	0.07	6.14	
50	Reverse Osmosis Water Purification Unit	5	1	4WD Pickups	3		2		0.20	0.02	0.01	0.00	0.00	6.06	0.51	0.36	0.01	0.03	
		5	1	LARCV	1		2	350.0	10.85	2.338	0.879935	0.7175	0.77	108.50	23.38	8.80	7.18	7.70	
		4	4	4WD Pickups	2		2		0.20	0.02	0.01	0.00	0.00	12.93	1.08	0.77	0.01	0.07	
		4	4	RTVs	6	48%	8	93.0	0.01	0.02	0.00	0.00	0.00	309.65	564.70	95.74	0.52	51.61	
51	Roll-on/Roll-off Discharge Facility	4	4	Generator	1	74%	8	22.0	0.01	0.01	0.00	0.00	0.00	12.41	18.84	6.66	4.17	2.76	
		4	4	Flatbed Truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	3.14	3.81	0.27	0.01	0.18	
		5	1	HMMWVs/Jeeps	3	65%	3		0.18	2.06	0.60	0.19	0.17	5.41	60.36	17.60	5.60	5.03	
52	MPF Utility Boat Operator Course	5	1	6-ton truck	1	80%	1		0.25	0.30	0.02	0.00	0.01	0.98	1.19	0.08	0.00	0.06	
		5	1	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	32.59	103.52	11.61	0.07	6.14	
		5	1	Cranes	2	43%	8	94.0	0.00	0.02	0.00	0.00	0.00	13.97	50.12	4.99	0.04	1.92	
		5	1	RTVs	2	48%	8	93.0	0.01	0.02	0.00	0.00	0.00	32.26	58.82	9.97	0.05	5.38	
		5	1	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	217.00	46.76	17.60	14.35	15.40	
53	LARC V Operator Training	9	2	Dozer	1	59%	8	240.0	0.01	0.02	0.00	0.00	0.00	117.33	372.66	41.81	0.27	22.12	
		9	2	Van	1		2		0.20	0.02	0.01	0.00	0.00	7.27	0.61	0.44	0.01	0.04	
		9	2	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	781.20	168.34	63.36	51.66	55.44	
6	1	LARCV	2		2	350.0	10.85	2.338	0.879935	0.7175	0.77	260.40	56.11	21.12	17.22	18.48			
<b>4.9.1 Conduct Mission Area Training</b>																			
<b>NSW Diving and Beach Operations</b>																			
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divin	1	126	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	152.71	12.78	9.15	0.17	0.77
		1	126	Bus	2		2		0.21	0.74	0.04	0.00	0.02	103.32	373.26	20.71	0.43	8.42	
55	Open Circuit Breathing Diving	1	12	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07
		1	12	Bus	2		2		0.21	0.74	0.04	0.00	0.02	9.84	35.55	1.97	0.04	0.80	
56	OTB Field Training Exercise	5	36	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	218.16	18.25	13.07	0.25	1.11
57	Rock Portage	1	18	4WD Pickups	1			2		0.20	0.02	0.01	0.00	0.00	7.27	0.61	0.44	0.01	0.04
<b>NSW Land Warfare</b>																			
58	Land Patrolling	1	18	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07
59	Immediate Action Drills	1	5	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	4.04	0.34	0.24	0.00	0.02
<b>NSW Advanced Training</b>																			
60	Over the Beach Insertion / Photo Reconnaissance	1	31	4WD Pickup	2			2		0.20	0.02	0.01	0.00	0.00	25.05	2.10	1.50	0.03	0.13
61	Photo Image Capture	14	3	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	33.94	2.84	2.03	0.04	0.17
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	22	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	17.78	1.49	1.06	0.02	0.09
63	Stalking, Movement and Hide-Sites	5	8	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	48.48	4.06	2.90	0.06	0.25

Table C-4  
Ground Vehicle Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)					
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
64	CQC/CQD	1	109	4WD Pickups	5			2		0.20	0.02	0.01	0.00	0.00	220.18	18.42	13.19	0.25	1.12	
65	Communications	5	6	4WD Pickups	6			2		0.20	0.02	0.01	0.00	0.00	72.72	6.08	4.36	0.08	0.37	
66	Unmanned Aerial Vehicle (UAV) Training	5	12	4WD Pickups	1			2		0.20	0.02	0.01	0.00	0.00	24.24	2.03	1.45	0.03	0.12	
67	Around the World Training	1	6	4WD Pickups	4			2		0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05	
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals NSW Physical Fitness Training</b>																				
68	Physical Training Runs	1	464	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	562.37	47.05	33.69	0.64	2.85	
69	Physical Conditioning Training Exercise	1	280	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	226.24	18.93	13.55	0.26	1.15	
70	Swim Training	1	170	4WD Pickups	1			2		0.20	0.02	0.01	0.00	0.00	68.68	5.75	4.11	0.08	0.35	
71	Hell Week	5	6	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	36.36	3.04	2.18	0.04	0.18	
72	Rucksack March	1	54	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	65.45	5.48	3.92	0.07	0.33	
73	Monster Mash	1	6	4WD Pickups	3			2		0.20	0.02	0.01	0.00	0.00	7.27	0.61	0.44	0.01	0.04	
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																				
74	Conduct Environmental Health Site Assessment	3	3	4WD Pickups	4			2		0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07	
		3	3	5-ton truck	1			2		0.25	0.30	0.02	0.00	0.01	4.41	5.36	0.38	0.01	0.26	
		3	3	3/4-ton trailer	1			2		0.25	0.30	0.02	0.00	0.01	4.41	5.36	0.38	0.01	0.26	
		3	3	small trailers	3			2		0.20	0.02	0.01	0.00	0.00	10.91	0.91	0.65	0.01	0.06	
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																				
75	Conventional Ordnance/Improvised Explosive Device Response	1	64	4WD Pickups	2			2		0.20	0.02	0.01	0.00	0.00	51.71	4.33	3.10	0.06	0.26	
76	Land Mine Detection/Neutralization	1	24	4WD Pickups / V	2			2		0.20	0.02	0.01	0.00	0.00	19.39	1.62	1.16	0.02	0.10	
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																				
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	4WD Pickups	140			2		0.20	0.02	0.01	0.00	0.00	28.28	2.37	1.69	0.03	0.14	
		14	53	Generators	176	74%		2	22.0		0.01	0.01	0.00	0.00	0.00	1.05	1.59	0.56	0.35	0.23
		14	53	Forklift	8	48%		8	37.0		0.01	0.01	0.00	0.00	0.00	0.05	0.07	0.03	0.02	0.01
<b>6.3.3 Combat Terrorism</b>																				
78	Small Boat Attack	1	30	None																

lbs/year 48088.47 93132.29 11475.12 4149.54 6683.55

Assumptions: Fuel truck is equivalent to 4WD vehicle; large trucks modeled as MDTs. Busses assumed to be diesel powered  
Emission factors from ARB's OFFROAD 2007 Model

tons/year 24.04 46.57 5.74 2.07 3.34



Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO	NOX	ROG	SOX	PM10	Emissions, lbs/year				
											lbs/item	lbs/item	lbs/item	lbs/item	lbs/item	Total	CO	Total NOx	Total ROG	Total SOx
33	Mobility Primary Mission Area		1	200	Smoke/Flares	3	Smoke		600		1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	7.20E+00	1.02E-02	1.26E+00	9.60E-02	7.80E+01
34	Escape and Evasion		1	20	Smoke/Flares	3	Smoke		60		1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	7.20E-01	1.02E-03	1.26E-01	9.60E-03	7.80E+00
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																				
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	Smoke Grenades/Flares	3	Smoke		372		1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	4.46E+00	6.32E-03	7.81E-01	5.95E-02	4.84E+01
36	Rappel and Fast Rope Training		1	6	None	0														
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASD)		14	14	≤ 10 lbs C-4 (underwater)	1	Underwater													
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																				
38	OPDS		25	6	None	0														
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	None	0														
40	Barge Ferry/Causeway Coxswain Training		3	34	None	0														
41	Causeway Pier Insertion and Retraction		5	9	None	0														
42	Elevated Causeway System (ELCAS)		10	2	None	0														
43	Establish Beach Party Command Post		4	16	5.56 caliber rounds	30	5.56 Blank		30		2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.40E-03	6.00E-04	0.00E+00	2.94E-01	2.07E-04
					7.62 caliber blanks	100	7.62 caliber blanks		100	(b)	6.80E-04	4.40E-05		3.50E-07	1.70E-05	6.80E-02	4.40E-03	0.00E+00	3.50E-05	1.70E-03
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0														
45	LCU/LCM Beaching		1	60	None	0														
46	LCU/LCM Towing/Being Towed		1	60	None	0														
47	Communications Training		2	1	0	0														
48	Field Training Exercise with a Beach Camp		14	1	5.56 caliber rounds	30	5.56 Blank		30	(c)	2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.40E-03	6.00E-04	0.00E+00	2.94E-01	2.07E-04
					7.62 caliber blanks	100	7.62 caliber blanks		100	(c)	6.80E-04	4.40E-05		3.50E-07	1.70E-05	6.80E-02	4.40E-03	0.00E+00	3.50E-05	1.70E-03
49	Maritime Pre-positioning Ships (MPS) Offload		5	1	None	0														
50	Reverse Osmosis Water Purification Unit		4	4	None	0														
51	Roll-on/Roll-off Discharge Facility		5	1	None	0														
52	MPF Utility Boat Operator Course		9	2	None	0														
53	LARC V Operator Training		6	1	None	0														
<b>4.9.1 Conduct Mission Area Training</b>																				
<b>NSW Diving and Beach Operations</b>																				
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divi		1	126	Diver Recall	1	Underwater													
55	Open Circuit Breathing Diving		1	12	Diver Recall	1	Underwater													
56	OTB Field Training Exercise		5	36	Small arm	15000 7.62mm; 19800 .5cal ANM	7.62 mm		15000		6.80E-04	4.40E-05		3.50E-07	1.70E-05	1.02E+01	6.60E-01	0.00E+00	5.25E-03	2.55E-01
							0.5 cal		19800		1.80E-03	2.80E-05			9.80E-05	3.56E+01	5.54E-01	0.00E+00	0.00E+00	1.94E+00
57	Rock Portage		1	18	Smoke Grenades/Flares	3	Smoke		54		1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	6.48E-01	9.18E-04	1.13E-01	8.64E-03	7.02E+00
							Grenades	M116A1	54		3.70E-04	5.60E-03	4.20E-05	4.70E-04	1.20E-01	2.00E-02	3.02E-01	2.27E-03	2.54E-02	6.48E+00
<b>NSW Land Warfare</b>																				
58	Land Patrolling		1	18	None	0														
59	Immediate Action Drills		1	5	50CAL/7.62 BLANK	5000 RNDs per operation (25000	0.5 cal		25000		1.80E-03	2.80E-05			9.80E-05	4.50E+01	7.00E-01	0.00E+00	0.00E+00	2.45E+00
							7.62 blank				6.80E-04	4.40E-05		3.50E-07	1.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>NSW Advanced Training</b>																				
60	Over the Beach Insertion / Photo Reconnaissance		1	31	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		310		3.10E-04	1.50E-05		8.20E-08	2.40E-05	9.61E-02	4.65E-03	0.00E+00	2.54E-05	7.44E-03
							5.56 blank		310		2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.68E-02	6.20E-03	0.00E+00	3.04E+00	2.14E-03
61	Photo Image Capture		14	3	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		30		3.10E-04	1.50E-05		8.20E-08	2.40E-05	9.30E-03	4.50E-04	0.00E+00	2.46E-06	7.20E-04
							5.56 blank		30		2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.40E-03	6.00E-04	0.00E+00	2.94E-01	2.07E-04
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	22	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		220		3.10E-04	1.50E-05		8.20E-08	2.40E-05	6.82E-02	3.30E-03	0.00E+00	1.80E-05	5.28E-03
							5.56 blank		220		2.80E-04	2.00E-05		9.80E-03	6.90E-06	6.16E-02	4.40E-03	0.00E+00	2.16E+00	1.52E-03
63	Stalking, Movement and Hide-Sites		5	8	None	0														
64	CQC/CQD		1	109	Small Arms	57600 9 MM simunition annual; 20000 5.56 simunition annual;	9 MM		57600		3.10E-04	1.50E-05			2.40E-05	1.79E+01	8.64E-01	0.00E+00	0.00E+00	1.38E+00
							5.56 Blank		20000		2.80E-04	2.00E-05		9.80E-03	6.90E-06	5.60E+00	4.00E-01	0.00E+00	1.96E+02	1.38E-01
							0.38 cal		4000		1.00E-04	6.80E-05		6.30E-07	1.80E-05	4.00E-01	2.72E-01	0.00E+00	2.52E-03	7.20E-02
							Grenades (flash crash)	M116A1	327		3.70E-04	5.60E-03	4.20E-05	4.70E-04	1.20E-01	1.21E-01	1.83E+00	1.37E-02	1.54E-01	3.92E+01
65	Communications		5	6	None	0														
66	Unmanned Aerial Vehicle (UAV) Training		5	12	none	0														
67	Around the World Training		1	6	none	0														
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and NSW Physical Fitness Training</b>																				
68	Physical Training Runs		1	464	None	0														
69	Physical Conditioning Training Exercise		1	280	None	0														
70	Swim Training		1		None	0														

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO	NOX	ROG	SOX	PM10	Emissions, lbs/year				
											lbs/item	lbs/item	lbs/item	lbs/item	lbs/item	Total	CO	Total NOx	Total ROG	Total SOx
71	Hell Week		5	6	Smokes Grenade Simulators White Para Flares 7.62 Blank (A111) 50 CAL Blank	128 per year 200 per year 12 per year 27000 per year 2000 per year	Smoke Grenades Flares 7.62 mm 0.5 cal		128 200 12 27000 2000		1.20E-02 3.70E-04 4.40E-03 6.80E-04 1.80E-03	1.70E-05 5.60E-03 5.70E-03 4.40E-05 2.80E-05	2.10E-03 4.20E-05 8.50E-05	1.60E-04 4.70E-04 1.30E-04 3.50E-07	1.30E-01 1.20E-01 1.70E-01 1.70E-05 9.80E-05	1.54E+00 7.40E-02 1.84E+01 3.60E+00	2.18E-03 1.12E+00 1.19E+00 5.60E-02	2.69E-01 8.40E-03 0.00E+00 0.00E+00	2.05E-02 9.40E-02 9.45E-03 0.00E+00	1.66E+01 2.40E+01 4.59E-01 1.96E-01
72	Rucksack March		1	54	None	0														
73	Monster Mash		1	6	None															
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																				
74	Conduct Environmental Health Site Assessment		3	3	None	0														
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																				
75	Conventional Ordnance/Improvised Explosive Device Response		1	64	0															
76	Land Mine Detection/Neutralization		1	24	0															
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																				
77	Field Training Exercise (FTX) e.g. SEAHAWK		14	53	0.50 cal blanks Grenades/flares M16 Rounds M60 Rounds 9mm Rounds	15650 per year 66 per year 8250 per year 8250 per year 6600 per year	Grenades	M116A1	15650 66 8250 8250 6600		1.10E-02 3.70E-04 7.80E-03 7.80E-03 3.10E-04	1.20E-03 5.60E-03 9.80E-05 9.80E-05	4.20E-05 4.70E-04	4.70E-04 1.40E-03 1.40E-03	3.10E-04 1.20E-01 1.40E-03 2.40E-05	1.72E+02 2.44E-02 2.05E+00	1.88E+01 3.70E-01 9.90E-02	0.00E+00 2.77E-03 0.00E+00	0.00E+00 3.10E-02 5.41E-04	4.85E+00 7.92E+00 1.58E-01
<b>6.3.3 Combat Terrorism</b>																				
78	Small Boat Attack		1	30	.50 cal rounds	350 per exercise			10500		1.80E-03	2.80E-05		9.80E-05	1.89E+01	2.94E-01	0.00E+00	0.00E+00	1.03E+00	

lbs/year  
tons/year  
432.13486 34.816665 4.002054 204.15236 515.70279  
0.2160674 0.0174083 0.002001 0.1020762 0.2578514

Ordnance and explosives emission factors from AP-42



Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Aircraft Fuel Use per hour	Total Fuel Use	Emissions Factors (lb/gallon fuel) (c)			Emissions Factors (lb/operation) (c)			Emissions (lbs)			
										CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O	
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring		1	72	None	0													
2	Towing		1	30	None	0													
3	Moor to Buoy		1	36	None	0													
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations		1	216	SH60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	770238.3085	21.730861	24.950248	
5	MCM Operations		1	32	None	0													
6	Floating Mine Operations		1	25	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	356591.8095	10.060584	11.551041	
7	Dive Platoon		1	8	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	114109.379	3.2193869	3.6963331	
8	Very Shallow Water (VSW) Operator Course		8	4	None	0													
9	VSW Mine Countermeasure Operations		1	120	None	0													
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations		1	120	None	0													
11	MK8 Marine Mammal/MMS Operations		1	175	None	0													
12	Mine Neutralization		1	4	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	57054.68952	1.6096934	1.8481665	
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure		1	30	None	0													
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling		1	94	None	0													
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None	0													
16	Basic Reconnaissance Course Final Mission		1	8	SH60	1	4.0	1200.0	4800.0	21.10	0.00	0.00	14263.67	0.40	0.46	456437.5162	12.877547	14.785332	
17	Obstacle Course		1	138	None	0													
18	Hydrographic Reconnaissance		1	40	None	0													
19	Surf Observations (SUROBS)		1	116	None	0													
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function		1	72	None	0													
21	CRRC Towing and High Speed Maneuver		1	8	None	0													
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean		1	24	None	0													
23	CRRC Navigation, Bay and Ocean Runs		1	26	None	0													
24	Amphibious Raid Course Final Mission		1	24	None	0													
25	Amphibious Raid Operations		3	2	CH-53E	3	4.0	4464.0	17856.0	21.10	0.00	0.00	53060.86	1.50	1.72	1273460.67	35.928357	41.251077	
					CH-46E	4	4.0	1120.0	4480.0	21.10	0.00	0.00	13312.76	0.38	0.43	426008.3484	12.019044	13.799643	
					CH-53E T&G	3	1.0	274.0	274.0	21.10	0.00	0.00	814.22	0.02	0.03	4885.30779	0.13783	0.1582493	
					CH-46E T&G	4	1.0	97.0	97.0	21.10	0.00	0.00	288.25	0.01	0.01	2305.960368	0.0650584	0.0746967	
					UH-1N	1	4.0	692.0	2768.0	21.10	0.00	0.00	8225.38	0.23	0.27	65803.07525	1.8565131	2.1315521	
26	Direct Action (DA) Operations		3	2	CH-46E	7	4.0	1120.0	4480.0	21.10	0.00	0.00	13312.76	0.38	0.43	745514.6097	21.033328	24.149376	
					UH-1N	1	4.0	692.0	2768.0	21.10	0.00	0.00	8225.38	0.23	0.27	65803.07525	1.8565131	2.1315521	
27	Craft Landing Zone (CLZ)		1	4	None	0													
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	52	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	741710.9638	20.926015	24.026165	
29	Over-the-Beach Stalk		1	16	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	57054.68952	1.6096934	1.8481665	
30	Immediate Action Drills		1	8	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	28527.34476	0.8048467	0.9240833	
31	Breacher Training		1	20	None	0													
32	Amphibious Warfare Exercise		1	50	None	0													
33	Mobility Primary Mission Area		1	200	None	0													
34	Escape and Evasion		1	20	None	0													
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	SH60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	442173.8438	12.475124	14.323291	
			1	124	CH46	1	1.0	1120.0	1120.0	21.10	0.00	0.00	3328.19	0.09	0.11	412695.5875	11.643449	13.368405	
36	Rappel and Fast Rope Training		1	6	NONE	0													
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy		14	14	SH-60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	698919.9466	19.718745	22.64004	
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																			
38	OPDS		25	6	None	0													
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	None	0													
40	Barge Ferry/Causeway Coxswain Training		3	34	None	0													
41	Causeway Pier Insertion and Retraction		5	9	None	0													
42	Elevated Causeway System (ELCAS)		10	2	None	0													
43	Establish Beach Party Command Post		4	16	None	0													
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0													
45	LCU/LCM Beaching		1	60	None	0													
46	LCU/LCM Towing/Being Towed		1	60	None	0													
47	Communications Training		2	1	None	0													
48	Field Training Exercise with a Beach Camp		14	1	None	0													
49	Maritime Pre-positioning Ships (MPS) Offload		5	1	None	0													
50	Reverse Osmosis Water Purification Unit		4	4	None	0													
51	Roll-on/Roll-off Discharge Facility		5	1	None	0													
52	MPF Utility Boat Operator Course		9	2	None	0													



Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators			Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hour)			Emissions, (lbs/year)			
							Hours	Propulsion No.	Generator No.										CO2	CH4	N2O	CO2	CH4	N2O	
<b>1.1.2 Conduct Maneuver - Move Forces</b>																									
1	Anchoring	1	72	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	308365.67	22.48183	7.899022
		1	72	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	38539136	2809.75	987.2094
2	Towing	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	611965.44	44.6162	15.67596
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	16057973	1170.729	411.3372
3	Moor to Buoy	1	36	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	154182.84	11.24092	3.949511
		1	36	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	19269568	1404.875	493.6047
<b>1.3.1 Perform Mine Countermeasures</b>																									
4	Parachute Operations	1	216	RHIBs	3	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	2775291	202.3365	71.0912
5	MCM Operations	1	32	Zodiacs	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	8018.9654	0.584634	0.205412
6	Floating Mine Operations	1	25	RHIBs	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	214142.83	15.61238	5.485432
7	Dive Platoon	1	8	RHIB	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	68525.705	4.995963	1.755338
8	Very Shallow Water (VSW) Operator Course	8	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	137051.41	9.991925	3.510676
9	VSW Mine Countermeasure Operations	1	120	RHIBs / Water-Jet Driven Craft	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	770914.18	56.20458	19.74756
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio	1	120	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	513942.79	37.46972	13.16504
11	MK8 Marine Mammal/MMS Operations	1	120	Submersible	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1498999.8	109.2867	38.39802
12	Mine Neutralization	1	175	RHIBs / Water-Jet Driven Craft	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1498999.8	109.2867	38.39802
		1	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	17131.426	1.248991	0.438835
<b>1.4.6 Conduct Maritime Interception</b>																									
13	Visit, Board, Search and Seizure	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	611965.44	44.6162	15.67596
		1	30	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	128485.7	9.36743	3.291259
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300k W ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	16057973	1170.729	411.3372
<b>1.5.4 Conduct Amphibious Operations</b>																									
14	Small Boat Handling	1	94	CRRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	141334.27	10.30417	3.620385
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	Personal Watercraft / CRRRC / RHIB	1	1	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	34445.102	2.511268	0.882338
16	Basic Reconnaissance Course Final Mission	1	8	IBS	1	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	3007.112	0.219238	0.077029
		1	8	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	460	100%	343.022	220	23	523.9665	0.0	0.0	25150.392	1.833625	0.644246
17	Obstacle Course	1	138	None																					
18	Hydrographic Reconnaissance	1	40	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	43739.811	3.188912	1.120429
		1	40	Small Water Craft	8	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	120284.48	8.769509	3.081179
		1	40	RHIB / CRRRC	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	256971.39	18.73486	6.582518
		1	40	rigid, 10-meter craft	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	256971.39	18.73486	6.582518
19	Surf Observations (SUROBS)	1	116	None																					
20	CRRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organi	1	72	CRRRC/Zodiac/Propeller Surface Craft/Rt	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	162384.05	11.83884	4.159591
		1	72	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	78731.661	5.740042	2.016772
21	CRRRC Towing and High Speed Maneuver	1	8	CRRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	12028.448	0.876951	0.308118
		1	8	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	8747.9623	0.637782	0.224086
22	CRRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay	1	24	CRRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	36085.344	2.630853	0.924354
		1	24	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	26243.887	1.913347	0.672257
		1	24	RHIB	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	154182.84	11.24092	3.949511
		1	24	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	460	100%	343.022	220	23	523.9665	0.0	0.0	75451.175	5.500874	1.932739

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)			Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hour)			Emissions, (lbs/year)												
							Hours	Propulsion		Generator		No.	No.										No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
								No.	No.	No.	No.																											
23	CRRC Navigation, Bay and Ocean Runs	1	26	CRRC	6	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	58638.685	4.275136	1.502075												
						1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	167031.41	12.17766	4.278637												
24	Amphibious Raid Course Final Mission	1	24	LCU	2	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	100601.57	7.334498	2.576986												
						1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	36085.344	2.630853	0.924354												
25	Amphibious Raid Operations	3	2	CRRCs	13	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	3257.7047	0.237508	0.083449												
						3	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	20398.848	1.487207	0.522532												
						3	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	8383.4639	0.611208	0.214749												
						3	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	11820	35%	8814.174	246	673	15069.65	1.1	0.4	120557.19	8.789391	3.088165												
26	Direct Action (DA) Operations	3	2	CRRCs	9	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	2255.334	0.164428	0.057772												
						3	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	20398.848	1.487207	0.522532												
27	Craft Landing Zone (CLZ)	1	4	1 LCAC per CLZ	1	2	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	7910	35%	5898.487	246	451	10084.68	0.7	0.3	80677.444	5.881902	2.066614												
<b>1.5.7 Conduct Naval Special Warfare</b>																																						
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	52	RHIBs / CRRCs	3	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1336251.2	97.42127	34.2291												
						4	2	Rigid, 10-meter craft	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	445417.08	32.47376	11.4097									
29	Over-the-Beach Stalk	1	16	CRRCs	1	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	2004.7414	0.146158	0.051353												
						1	2	Boston Whaler	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	5831.9749	0.425188	0.14939									
30	Immediate Action Drills	1	8	RHIBs	1	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	17131.426	1.248991	0.438835												
						1	2	CRRCs	1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	1002.3707	0.073079	0.025676									
31	Breacher Training	1	20	None	0																																	
32	Amphibious Warfare Exercise	1	50	RHIBs	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	214142.83	15.61238	5.485432												
						1	2	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	4570	100%	3407.849	220	233	5205.493	0.4	0.1	1041098.6	75.90276	26.66854									
33	Mobility Primary Mission Area	1	200	RHIB or MK V	4	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1713142.6	124.8991	43.88346												
34	Escape and Evasion	1	20	RHIBs	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	85657.131	6.244953	2.194173												
						1	2	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	4570	100%	3407.849	220	233	5205.493	0.4	0.1	416439.46	30.3611	10.66741									
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																																						
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	124	RHIBs	1	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	265537.11	19.35936	6.801936												
						1	2	CRRCs	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	31073.491	2.265456	0.795971									
36	Rappel and Fast Rope Training	1	6	None																																		
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASD)	14	14	RHIBs	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	839439.88	61.20054	21.50289												
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																																						
38	OPDS	25	6	OUBs	2	4	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	2515039.2	183.3625	64.42465												
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	4	Warping Tug	1	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	815953.92	59.48827	20.90128												
						10	4	Barge Ferry	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	1631907.8	118.9765	41.80257									
40	Barge Ferry/Causeway Coxswain Training	3	34	Barge Ferry	2	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	4161365	303.3902	106.5965												
41	Causeway Pier Insertion and Retraction	5	9	WTs	4	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	3671792.7	267.6972	94.05577												
42	Elevated Causeway System (ELCAS)	10	2	WTs	2	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	815953.92	59.48827	20.90128												
		10	2	Personal Watercraft	2	4	4	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	29159.874	2.125942	0.746952												
						10	2	LCM	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	167669.28	12.22416	4.294977									
43	Establish Beach Party Command Post	4	16	None																																		

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hour)			Emissions, (lbs/year)			
							Hours	Propulsion		Generator										CO2	CH4	N2O	CO2	CH4	N2O	
								No.	No.	No.																No.
44 Sterngate Marriage to Amphibious Ship/LCU	1	40	LCU	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	670677.11	48.89666	17.17991		
45 LCU/LCM Beaching	1	60	LCU	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	503007.83	36.67249	12.88493		
	1	60	LCM-8	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	503007.83	36.67249	12.88493		
46 LCU/LCM Towing/Being Towed	1	60	LCU	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	1006015.7	73.34498	25.76986		
	1	60	LCM-8	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	1006015.7	73.34498	25.76986		
47 Communications Training	2	1	None		2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	20958.66	1.528021	0.536872		
48 Field Training Exercise with a Beach Camp	14	1	None		2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	101994.24	7.436033	2.61266		
49 Maritime Pre-positioning Ships (MPS) Offload	5	1	LCM-8		2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	101994.24	7.436033	2.61266		
	5	1	WTs		2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	101994.24	7.436033	2.61266		
50 Reverse Osmosis Water Purification Unit	4	4	None		2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	101994.24	7.436033	2.61266		
51 Roll-on/Roll-off Discharge Facility	5	1	WTs		2	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	3644.9843	0.265743	0.093369		
	5	1	Personal Watercraft		2	Diesel Engines	2	None	0	2	660	2	NA	1320	100%	984.324	220	67	1503.556	0.1	0.0	216512.07	15.78512	5.546122		
<b>4.9.1 Conduct Mission Area Training</b>																										
<b>NSW Diving and Beach Operations</b>																										
54 Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divi	1	126	RHIBs	5	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1349099.8	98.35802	34.55822		
55 Open Circuit Breathing Diving	1	12	RHIBs	5	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	128485.7	9.36743	3.291259		
			LCU	1	1																					
56 OTB Field Training Exercise	5	36	CRRCs	5	2	assume paddling																				
57 Rock Portage	1	18	CRRCs	7	2	assume paddling																				
	1	18	IBS	9	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	20298.006	1.479855	0.519949		
<b>NSW Land Warfare</b>																										
58 Land Patrolling	1	18	None																							
59 Immediate Action Drills	1	5	None																							
<b>NSW Advanced Training</b>																										
60 Over the Beach Insertion / Photo Reconnaissance	1	31	RHIB/CRRC	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	66384.276	4.839839	1.700484		
	1	31	Kayak	1	2	assume paddling																				
61 Photo Image Capture	14	3	None																							
62 Field Skills (Observation Drill, Sketching, Range Estimation)	1	22	None																							
63 Stalking, Movement and Hide-Sites	5	8	None																							
64 CQC/CQD	1	109	CRRCs	5	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	68286.503	4.978523	1.749211		
65 Communications	5	6	None																							
66 Unmanned Aerial Vehicle (UAV) Training	5	12	None																							
67 Around the World Training	1	6	CRRCs	7	2	assume paddling																				
	1	6	Sea Kayaks	5	2	assume paddling																				
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and NSW Physical Fitness Training</b>																										
68 Physical Training Runs	1	464	None																							
69 Physical Conditioning Training Exercise	1	280	CRRCs / Propeller Surface Craft	3	2	assume paddling																				
70 Swim Training	1	170	RHIBs	5	2	assume paddling																				
71 Hell Week	5	6	CRRCs	5	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	18794.45	1.370236	0.481434		
72 Rucksack March	1	54	None																							
73 Monster Mash	1	6	CRRCs	3	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	2255.334	0.164428	0.057772		
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																										
74 Conduct Environmental Health Site Assessment	3	3	None																							
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																										
75 Conventional Ordnance/Improvised Explosive Device Response	1	64	None																							
76 Land Mine Detection/Neutralization	1	24	None																							
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																										
77 Field Training Exercise (FTX) e.g. SEAHAWK	14	53	Boston Whalers	144	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	19682.915	1.435011	0.504193		

Scenario Type Training	Reference Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)		Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hour)			Emissions, (lbs/year)		
					Hours	No.	Propulsion	No.	Generator	No.										CO2	CH4	N2O	CO2	CH4	N2O
6.3.3 Combat Terrorism 78 Small Boat Attack	1	30	Boston Whalers	1	2		OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	4100.6073	0.298961	0.10504
	1	30	surface vessel dropping anchor and 3 sh	1	2																				
	1	30	18' Bayliner	1	2		OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	4100.6073	0.298961	0.10504

125938001 9181.6868 3225.9981

Assume marine vessels participate for one day during Amphibious Raid Operations and Direct Action Operations and Seahawk  
Assumptions: Watercraft operates 8 hours per day for the days during which the operation occurs

Emissions, short tons/year 62969.00 4.59 1.61

Table C-8  
Ground Vehicle GHG Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
<b>1.1.2 Conduct Maneuver - Move Forces</b>															
1	Anchoring		1	72	None										
2	Towing		1	30	None										
3	Moor to Buoy		1	36	None										
<b>1.3.1 Perform Mine Countermeasures</b>															
4	Parachute Operations		1	216	4WD Pickups	2		2		22.71	0.00	0.00	19624.03	1.63	1.39
5	MCM Operations		1	32	4WD Pickups	2		2		22.71	0.00	0.00	2907.26	0.24	0.21
6	Floating Mine Operations		1	25	4WD Pickups	1		2		22.71	0.00	0.00	1135.65	0.09	0.08
7	Dive Platoon		1	8	None										
8	Very Shallow Water (VSW) Operator Course		8	4	None										
9	VSW Mine Countermeasure Operations		1	120	None										
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio		1	120	None										
11	MK8 Marine Mammal/MMS Operations		1	175	4WD Pickups	0		2		22.71	0.00	0.00	0.00	0.00	0.00
12	Mine Neutralization		1	4	4WD Pickups	2		2		22.71	0.00	0.00	363.41	0.03	0.03
<b>1.4.6 Conduct Maritime Interception</b>															
13	Visit, Board, Search and Seizure		1	30	None										
<b>1.5.4 Conduct Amphibious Operations</b>															
14	Small Boat Handling		1	94	HMMWV	1	65%	3	150	1.25	0.00	0.00	34448.31	3.82	0.00
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	HMMWV	1	65%	3	150	1.25	0.00	0.00	69263.09	7.68	0.00
			1	189	Truck	1	80%	1		48.21	0.00	0.03	7288.73	0.20	4.28
16	Basic Reconnaissance Course Final Mission		1	8	None										
17	Obstacle Course		1	138	4WD Pickups	2		2		22.71	0.00	0.00	12537.58	1.04	0.89
18	Hydrographic Reconnaissance		1	40	4WD Pickups	3		2		22.71	0.00	0.00	5451.12	0.45	0.39
19	Surf Observations (SUROBS)		1	116	4WD Pickups	2		2		22.71	0.00	0.00	10538.83	0.87	0.74
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ		1	72	HMMWV/ 4WD P	2	65%	3	150	1.25	0.00	0.00	52771.88	5.85	0.00
21	CRRC Towing and High Speed Maneuver		1	8	4WD Pickups / H	1		2		22.71	0.00	0.00	363.41	0.03	0.03
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay		1	24	4WD Pickups / H	1		2		22.71	0.00	0.00	1090.22	0.09	0.08
23	CRRC Navigation, Bay and Ocean Runs		1	26	4WD Pickups / H	1		8		22.71	0.00	0.00	4724.30	0.39	0.33
24	Amphibious Raid Course Final Mission		1	24	None	0									
25	Amphibious Raid Operations		3	2	HMMWVs	6	65%	3	150	1.25	0.00	0.00	13192.97	1.46	0.00
			3	2	4WD Pickups	8		8		22.71	0.00	0.00	8721.79	0.72	0.62
			3	2	AAVs	6		2		180.277	0.0	0.0	12979.94	0.95	0.33
			3	2	LAVs	6	65%	2	150.0	1.25	0.00	0.00	8795.31	0.98	0.00
			3	2	IFAVs	6	65%	2	150.0	1.25	0.00	0.00	8795.31	0.98	0.00
26	Direct Action (DA) Operations		3	2	Light Wheeled V	16		2		22.71	0.00	0.00	4360.90	0.36	0.31
27	Craft Landing Zone (CLZ)		1	4	HMMWVs	1	65%	3	150	1.25	0.00	0.00	1465.89	0.16	0.00
<b>1.5.7 Conduct Naval Special Warfare</b>															
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	52	4WD Pickups	3		2		22.71	0.00	0.00	28345.82	2.35	2.00
29	Over-the-Beach Stalk		1	16	4WD Pickups	1		2		22.71	0.00	0.00	726.82	0.06	0.05
30	Immediate Action Drills		1	8	4WD Pickups	4		2		22.71	0.00	0.00	1453.63	0.12	0.10
31	Breacher Training		1	20	4WD Pickups	3		2		22.71	0.00	0.00	2725.56	0.23	0.19
32	Amphibious Warfare Exercise		1	50	None	0									
33	Mobility Primary Mission Area		1	200	None	0									
34	Escape and Evasion		1	20	None	0									
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>															
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	4WD Pickups	2		2		22.71	0.00	0.00	11265.65	0.93	0.80
36	Rappel and Fast Rope Training		1	6	4WD Pickups	4		2		22.71	0.00	0.00	1090.22	0.09	0.08

Table C-8  
Ground Vehicle GHG Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (AS14		14		4WD Pickups	2		2		22.71	0.00	0.00	17806.99	1.48	1.26
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>															
38	OPDS		25	6	HMMWVs	1	65%	3	150	1.25	0.00	0.00	54970.71	6.09	0.00
			25	6	5-ton truck	1	80%	1		48.21	0.00	0.03	5784.70	0.15	3.40
			25	6	Dozer	2	59%	8	240.0	1.25	0.00	0.00	425783.36	47.20	0.00
			25	6	Comm Van	1		8		22.71	0.00	0.00	27255.60	2.26	1.93
			25	6	RTV forklift	1	48%	8	93.0	1.25	0.00	0.00	66415.89	7.36	0.00
			25	6	LARCV	2		2	350.0	10.85	2.338	0.879935	6510.00	1402.80	527.96
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	HMMWVs	1	65%	3	150	1.25	0.00	0.00	14658.85	1.63	0.00
			10	4	5-ton truck	1	80%	1		48.21	0.00	0.03	1542.59	0.04	0.91
			10	4	Van	1		8		22.71	0.00	0.00	7268.16	0.60	0.51
			10	4	Dozers	2	59%	8	240.0	1.25	0.00	0.00	113542.23	12.59	0.00
			10	4	Rough Terrain F	1	48%	8	37.0	1.25	0.00	0.00	7120.44	0.79	0.00
			10	4	LARCV	2		2	350.0	10.85	2.338	0.879935	1736.00	374.08	140.79
40	Barge Ferry/Causeway Coxswain Training		3	34	HMMWVs	1	65%	3	150	1.25	0.00	0.00	37380.08	4.14	0.00
			3	34	5-ton truck	1	80%	1		48.21	0.00	0.03	3933.60	0.11	2.31
			3	34	Van	1		8		22.71	0.00	0.00	18533.81	1.54	1.31
			3	34	Dozer	2	59%	8	240.0	1.25	0.00	0.00	289532.68	32.10	0.00
			3	34	LARCV	2		2	350.0	10.85	2.338	0.879935	4426.80	953.90	359.01
41	Causeway Pier Insertion and Retraction		5	9	HMMWVs	2	65%	3	150	1.25	0.00	0.00	32982.42	3.66	0.00
			5	9	5-ton truck	1	80%	1		48.21	0.00	0.03	1735.41	0.05	1.02
			5	9	Van	1		8		22.71	0.00	0.00	8176.68	0.68	0.58
			5	9	Rough Terrain F	1	48%	8	37.0	1.25	0.00	0.00	8010.50	0.89	0.00
			5	9	Dozers	2	59%	8	240.0	1.25	0.00	0.00	127735.01	14.16	0.00
			5	9	LARCV	2		2	350.0	10.85	2.338	0.879935	1953.00	420.84	158.39
42	Elevated Causeway System (ELCAS)		10	2	HMMWVs	4	65%	3	150	1.25	0.00	0.00	29317.71	3.25	0.00
			10	2	5-ton truck	3	80%	1		48.21	0.00	0.03	2313.88	0.06	1.36
			10	2	Light Trucks	4	62%	8	161.0	1.25	0.00	0.00	80040.86	8.87	0.00
			10	2	Dozers	2	59%	8	240.0	1.25	0.00	0.00	56771.11	6.29	0.00
			10	2	Forklifts	1	48%	8	37.0	1.25	0.00	0.00	3560.22	0.39	0.00
			10	2	75-Ton Crane	2	74%	8	194.0	1.25	0.00	0.00	57556.93	6.38	0.00
			10	2	Pile Driver	2	30%	24	20.0	1.25	0.00	0.00	7216.67	0.80	0.00
			10	2	ambulance	1		8		22.71	0.00	0.00	3634.08	0.30	0.26
			10	2	water buffalo	1	80%	1		48.21	0.00	0.03	771.29	0.02	0.45
			10	2	140-ton crane	1	74%	8	399.0	1.25	0.00	0.00	59188.70	6.56	0.00
			10	2	30-ton crane	2	74%	8	194.0	1.25	0.00	0.00	57556.93	6.38	0.00
			10	2	LARCV	2		2	350.0	10.85	2.338	0.879935	868.00	187.04	70.39
			10	2	Air compressors	2	48%	8	106.0	1.25	0.00	0.00	20399.11	2.26	0.00
			10	2	Pile Extractor	1	30%	24	20.0	1.25	0.00	0.00	3608.33	0.40	0.00
43	Establish Beach Party Command Post		4	16	HMMWVs	3	65%	3	150	1.25	0.00	0.00	70362.50	7.80	0.00
			4	16	5-ton truck	1	80%	1		48.21	0.00	0.03	2468.14	0.07	1.45
			4	16	Dozer	1	59%	8	240.0	1.25	0.00	0.00	90833.78	10.07	0.00
			4	16	Generators/vario	2	30%	24	Various	2064.95	0.00	5.28	951528.96	0.00	2433.02
			4	16	Heaters	2	51%	8	238.0	1.25	0.00	0.00	155726.05	17.26	0.00
			4	16	LARCV	2		2	350.0	10.85	2.338	0.879935	2777.60	598.53	225.26
44	Sterngate Marriage to Amphibious Ship/LCU		1	60	None	0									
45	LCU/LCM Beaching		1	60	HMMWVs	1	65%	3	150	1.25	0.00	0.00	21988.28	2.44	0.00
			1	60	5-ton truck	1	80%	1		48.21	0.00	0.03	2313.88	0.06	1.36
			1	60	Dozer	1	59%	8	240.0	1.25	0.00	0.00	85156.67	9.44	0.00
			1	60	LARCV	1		2	350.0	10.85	2.338	0.879935	1302.00	280.56	105.59
46	LCU/LCM Towing/Being Towed		1	60	Dozer	1	59%	8	240.0	1.25	0.00	0.00	85156.67	9.44	0.00

Table C-8  
Ground Vehicle GHG Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
47	Communications Training	2	1	4WD Pickups	4					22.71	0.00	0.00	363.41	0.03	0.03
		2	1	RTVs	4	48%	8	93.0	1.25	0.00	0.00	3542.18	0.39	0.00	
		2	1	Bus	2		2		89.15	0.00	0.07	713.23	0.02	0.56	
48	Field Training Exercise with a Beach Camp	2	1	Tractor with flat t	1	80%	1		48.21	0.00	0.03	77.13	0.00	0.05	
		14	1	HMMWVs	2	65%	3	150	1.25	0.00	0.00	10261.20	1.14	0.00	
		14	1	5-ton truck	1	80%	1		48.21	0.00	0.03	539.91	0.01	0.32	
		14	1	Dozer	2	59%	8	240.0	1.25	0.00	0.00	39739.78	4.41	0.00	
		14	1	4WD Pickups	10		2		22.71	0.00	0.00	6359.64	0.53	0.45	
		14	1	Fuel Truck	1		2		22.71	0.00	0.00	635.96	0.05	0.04	
		14	1	20-ton Stake Tru	1		2	150	1.25	0.00	0.00	35.08	0.00	0.00	
		14	1	50-ton Low-bed	1		2	150	1.25	0.00	0.00	35.08	0.00	0.00	
		14	1	Wheeled Loader	2	47%	8	147.0	1.25	0.00	0.00	19183.71	2.13	0.00	
		14	1	Generators/vario	23	30%	24	Various	2064.95	0.00	5.28	208146.96	0.00	532.22	
49	Maritime Pre-positioning Ships (MPS) Offload	14	1	Heaters	117	51%	8	238.0	1.25	0.00	0.00	1992806.83	220.92	0.00	
		14	1	Welder	6	45%	8	45.0	1.25	0.00	0.00	17049.38	1.89	0.00	
		14	1	LARCV	2		2	350.0	10.85	2.338	0.879935	607.60	130.93	49.28	
		5	1	HMMWVs	2	65%	3	150	1.25	0.00	0.00	24.43	0.00	0.00	
		5	1	5-ton truck	1	80%	1		48.21	0.00	0.03	192.82	0.01	0.11	
50	Reverse Osmosis Water Purification Unit	5	1	Dozer	1	59%	8	240.0	1.25	0.00	0.00	7096.39	0.79	0.00	
		5	1	4WD Pickups	3		2	150	22.71	0.00	0.00	681.39	0.06	0.05	
		5	1	LARCV	1		2	350.0	10.85	2.338	0.879935	108.50	23.38	8.80	
		4	4	4WD Pickups	2		2		22.71	0.00	0.00	1453.63	0.12	0.10	
51	Roll-on/Roll-off Discharge Facility	4	4	RTVs	6	48%	8	93.0	1.25	0.00	0.00	42506.17	4.71	0.00	
		4	4	Generator	1	74%	8	22.0	1.25	0.00	0.00	2610.83	0.29	0.00	
		4	4	Flatbed Truck	1	80%	1		48.21	0.00	0.03	617.03	0.02	0.36	
		5	1	HMMWVs/Jeeps	3	65%	3	150	1.25	0.00	0.00	5497.07	0.61	0.00	
		5	1	6-ton truck	1	80%	1		48.21	0.00	0.03	192.82	0.01	0.11	
		5	1	Dozer	1	59%	8	240.0	1.25	0.00	0.00	7096.39	0.79	0.00	
		5	1	Cranes	2	43%	8	94.0	1.25	0.00	0.00	4051.36	0.45	0.00	
52	MPF Utility Boat Operator Course	5	1	RTVs	2	48%	8	93.0	1.25	0.00	0.00	4427.73	0.49	0.00	
		5	1	LARCV	2		2	350.0	10.85	2.338	0.879935	217.00	46.76	17.60	
		9	2	Dozer	1	59%	8	240.0	1.25	0.00	0.00	25547.00	2.83	0.00	
		9	2	Van	1		2		22.71	0.00	0.00	817.67	0.07	0.06	
53	LARC V Operator Training	9	2	LARCV	2		2	350.0	10.85	2.338	0.879935	781.20	168.34	63.36	
		6	1	LARCV	2		2	350.0	10.85	2.338	0.879935	260.40	56.11	21.12	
<b>4.9.1 Conduct Mission Area Training</b>															
<b>NSW Diving and Beach Operations</b>															
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divir	1	126	4WD Pickups	3					22.71	0.00	0.00	17171.03	1.43	1.21
		1	126	Bus	2					89.15	0.00	0.07	44933.29	0.97	35.46
55	Open Circuit Breathing Diving	1	12	4WD Pickups	3					22.71	0.00	0.00	1635.34	0.14	0.12
		1	12	Bus	2					89.15	0.00	0.07	4279.36	0.09	3.38
56	OTB Field Training Exercise	5	36	4WD Pickups	3					22.71	0.00	0.00	24530.04	2.04	1.73
57	Rock Portage	1	18	4WD Pickups	1					22.71	0.00	0.00	817.67	0.07	0.06
<b>NSW Land Warfare</b>															
58	Land Patrolling	1	18	4WD Pickups	2					22.71	0.00	0.00	1635.34	0.14	0.12
59	Immediate Action Drills	1	5	4WD Pickups	2					22.71	0.00	0.00	454.26	0.04	0.03
<b>NSW Advanced Training</b>															
60	Over the Beach Insertion / Photo Reconnaissance	1	31	4WD Pickup	2					22.71	0.00	0.00	2816.41	0.23	0.20
61	Photo Image Capture	14	3	4WD Pickups	2					22.71	0.00	0.00	3815.78	0.32	0.27
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	22	4WD Pickups	2					22.71	0.00	0.00	1998.74	0.17	0.14
63	Stalking, Movement and Hide-Sites	5	8	4WD Pickups	3					22.71	0.00	0.00	5451.12	0.45	0.39

Table C-8  
Ground Vehicle GHG Emissions  
No Action Alternative

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
64	CQC/CQD	1	109		4WD Pickups	5		2		22.71	0.00	0.00	24757.17	2.05	1.75
65	Communications	5	6		4WD Pickups	6		2		22.71	0.00	0.00	8176.68	0.68	0.58
66	Unmanned Aerial Vehicle (UAV) Training	5	12		4WD Pickups	1		2		22.71	0.00	0.00	2725.56	0.23	0.19
67	Around the World Training	1	6		4WD Pickups	4		2		22.71	0.00	0.00	1090.22	0.09	0.08
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals</b>															
<b>NSW Physical Fitness Training</b>															
68	Physical Training Runs	1	464		4WD Pickups	3		2		22.71	0.00	0.00	63232.99	5.25	4.47
69	Physical Conditioning Training Exercise	1	280		4WD Pickups	2		2		22.71	0.00	0.00	25438.56	2.11	1.80
70	Swim Training	1	170		4WD Pickups	1		2		22.71	0.00	0.00	7722.42	0.64	0.55
71	Hell Week	5	6		4WD Pickups	3		2		22.71	0.00	0.00	4088.34	0.34	0.29
72	Rucksack March	1	54		4WD Pickups	3		2		22.71	0.00	0.00	7359.01	0.61	0.52
73	Monster Mash	1	6		4WD Pickups	3		2		22.71	0.00	0.00	817.67	0.07	0.06
<b>4.12.6 Provide Industrial and Environmental Health Services</b>															
74	Conduct Environmental Health Site Assessment	3	3		4WD Pickups	4		2		22.71	0.00	0.00	1635.34	0.14	0.12
		3	3		5-ton truck	1		2		48.21	0.00	0.03	867.71	0.02	0.51
		3	3		3/4-ton trailer	1		2		48.21	0.00	0.03	867.71	0.02	0.51
		3	3		small trailers	3		2		22.71	0.00	0.00	1226.50	0.10	0.09
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>															
75	Conventional Ordnance/Improvised Explosive Device Response	1	64		4WD Pickups	2		2		22.71	0.00	0.00	5814.53	0.48	0.41
76	Land Mine Detection/Neutralization	1	24		4WD Pickups / V	2		2		22.71	0.00	0.00	2180.45	0.18	0.15
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>															
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53		4WD Pickups	140		2		22.71	0.00	0.00	3179.82	0.26	0.22
		14	53		Generators	176	74%	2	22.0	1.25	0.00	0.00	220.51	0.02	0.00
		14	53		Forklift	8	48%	8	37.0	1.25	0.00	0.00	10.02	0.00	0.00
<b>6.3.3 Combat Terrorism</b>															
78	Small Boat Attack	1	30		None										

6138867.99      5173.27      4801.42

Assumptions: Fuel truck is equivalent to 4WD vehicle; large trucks modeled as MDTs. Busses assumed to be diesel powered  
Emission factors from ARB's OFFROAD 2007 Model

Emissions, short tons/year      3069.43      2.59      2.40

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO2	Emissions, lbs/year
											lbs/item	Total CO2
<b>Conduct Maneuver - Move Forces</b>												
1	Anchoring		1	72	None							
2	Towing		1	30	None							
3	Moor to Buoy		1	36	None							
<b>1.3.1 Perform Mine Countermeasures</b>												
4	Parachute Operations		1	216	Smoke Grenades/Flares	3	Smoke Gr	M18 Green	648		8.40E-02	5.44E+01
5	MCM Operations		1	32	Blast Caps/ Diver Recalls	1	Green Par	M195	648		8.80E-02	5.70E+01
6	Floating Mine Operations		1	25	Blast Caps/ Diver Recalls	1	Underwater		25		0.790	1.98E+01
7	Dive Platoon		1	8	Blast Caps/Explosives	9 per training	Underwater					
			1	8	3.5 lb	8 sequential command detonated	Underwater					
8	Very Shallow Water (VSW) Operator Course		8	4	Diver Recalls	2 per training	Underwater					
9	VSW Mine Countermeasure Operations		1	120	Diver Recalls	2 per training	Underwater					
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio		1	120	Blast Caps/ Diver Recalls	2 per training	Underwater					
11	MK8 Marine Mammal/MMS Operations		1	175	13lbs [MK 87/88 C-4 in GRP	Approximately 10% of training inv	Underwater					
					29lb [MK86/89 PBXN in AL canis	Approximately 10% of training inv	Underwater					
12	Mine Neutralization		1	4	Blast Caps/ Diver Recalls	9 per training	Underwater		8		0.790	6.32E+00
			1	4	3.5lb explosive	8 sequential command detonated	Underwater					
<b>1.4.6 Conduct Maritime Interception</b>												
13	Visit, Board, Search and Seizure		1	30	None							
<b>1.5.4 Conduct Amphibious Operations</b>												
14	Small Boat Handling		1	94	None							
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None							
16	Basic Reconnaissance Course Final Mission		1	8	None							
17	Obstacle Course		1	138	None							
18	Hydrographic Reconnaissance		1	40	None							
19	Surf Observations (SUROBS)		1	116	None							
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ		1	72	None							
21	CRRC Towing and High Speed Maneuver		1	8	None							
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay		1	24	None							
23	CRRC Navigation, Bay and Ocean Runs		1	26	None							
24	Amphibious Raid Course Final Mission		1	24	None							
25	Amphibious Raid Operations		3	2	Flares	3	Green Par	M195	6		8.80E-02	5.28E-01
					Grenades	20	Grenades	M116A1	40		4.10E-03	1.64E-01
					9MM	210	9 MM		210		2.00E-04	4.20E-02
					5.56MM/38CAL	60/15	5.56 Blank		60		2.30E-04	1.38E-02
							38 cal Blank		15		9.90E-04	1.49E-02
					Diver Recalls	3	Underwater					
26	Direct Action (DA) Operations		3	2	Explosives	10			20		0.790	1.58E+01
					Smoke	3	Smoke		6		8.40E-02	5.04E-01
					9MM	137 per year	9 MM		137		2.00E-04	2.74E-02
					5.56MM/38CAL	50/10 per year	5.56 Blank		50		2.30E-04	1.15E-02
							38 cal		10		9.90E-04	9.90E-03

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO2	Emissions, lbs/year
											lbs/item	Total CO2
27	Craft Landing Zone (CLZ)		1	4	Diver Recalls Smoke	3 3	Underwater Smoke		12		8.40E-02	1.01E+00
<b>1.5.7 Conduct Naval Special Warfare</b>												
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	52	Smokes/Flares/Surface Explosives Small Arms	3 flares, 10 grenades 6600/5000 .5 cal/7.62 mm	Grenades Green Par 0.5 cal 7.62 mm	M116A1 M195	520 156 6600 5000		4.10E-03 8.80E-02 2.10E-03 9.50E-04	2.13E+00 1.37E+01 1.39E+01 4.75E+00
29	Over-the-Beach Stalk		1	16	None							
30	Immediate Action Drills		1	8	Smokes/Flares/Surface	10	Grenades	M116A1	80		4.10E-03	3.28E-01
				6	Small Arms	5000	Green Par 0.50 cal/7.62 blank	M195	24 30000		8.80E-02 2.10E-03	2.11E+00 6.30E+01
31	Breacher Training		1	20	Small Arms	0	12 gauge		150		1.30E-03	1.95E-01
32	Amphibious Warfare Exercise		1	50	Smoke Grenades/Flares	3						
33	Mobility Primary Mission Area		1	200	Smoke/Flares	3	Smoke		600		8.40E-02	5.04E+01
34	Escape and Evasion		1	20	Smoke/Flares	3	Smoke		60		8.40E-02	5.04E+00
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>												
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	124	Smoke Grenades/Flares	3	Smoke		372		8.40E-02	3.12E+01
36	Rappel and Fast Rope Training		1	6	None	0						
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (AS)		14	14	≤ 10 lbs C-4 (underwater)	1	Underwater					
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>												
38	OPDS		25	6	None	0						
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	4	None	0						
40	Barge Ferry/Causeway Coxswain Training		3	34	None	0						
41	Causeway Pier Insertion and Retraction		5	9	None	0						
42	Elevated Causeway System (ELCAS)		10	2	None	0						
43	Establish Beach Party Command Post		4	16	5.56 caliber rounds 7.62 caliber blanks	30 100	5.56 Blank 7.62 caliber blanks		30 100	(b)	2.30E-04 9.50E-04	6.90E-03 9.50E-02
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0						
45	LCU/LCM Beaching		1	60	None	0						
46	LCU/LCM Towing/Being Towed		1	60	None	0						
47	Communications Training		2	1	0							
48	Field Training Exercise with a Beach Camp		14	1	5.56 caliber rounds 7.62 caliber blanks	30 100	5.56 Blank 7.62 caliber blanks		30 100	(c) (c)	2.30E-04 9.50E-04	6.90E-03 9.50E-02
49	Maritime Pre-positioning Ships (MPS) Offload		5	1	None	0						
50	Reverse Osmosis Water Purification Unit		4	4	None	0						
51	Roll-on/Roll-off Discharge Facility		5	1	None	0						
52	MPF Utility Boat Operator Course		9	2	None	0						
53	LARC V Operator Training		6	1	None	0						
<b>4.9.1 Conduct Mission Area Training</b>												
<b>NSW Diving and Beach Operations</b>												
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divin		1	126	Diver Recall	1	Underwater					
55	Open Circuit Breathing Diving		1	12	Diver Recall	1	Underwater					
56	OTB Field Training Exercise		5	36	Small arm	15000 7.62mm; 19800 .5cal ANN	7.62 mm		15000		6.80E-04	1.02E+01

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO2	Emissions, lbs/year
											lbs/item	Total CO2
57	Rock Portage		1	18	Smoke Grenades/Flares	3	0.5 cal Smoke Grenades	M116A1	19800 54 54		2.10E-03 8.40E-02 3.70E-04	4.16E+01 4.54E+00 2.00E-02
<b>NSW Land Warfare</b>												
58	Land Patrolling		1	18	None	0						
59	Immediate Action Drills		1	5	50CAL/7.62 BLANK	5000 RNDs per operation (25000	0.5 cal 7.62 blank		25000		2.10E-03 9.50E-04	5.25E+01 0.00E+00
<b>NSW Advanced Training</b>												
60	Over the Beach Insertion / Photo Reconnaissance		1	31	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank 5.56 blank		310 310		2.00E-04 2.30E-04	6.20E-02 7.13E-02
61	Photo Image Capture		14	3	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank 5.56 blank		30 30		2.00E-04 2.30E-04	6.00E-03 6.90E-03
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	22	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank 5.56 blank		220 220		2.00E-04 2.30E-04	4.40E-02 5.06E-02
63	Stalking, Movement and Hide-Sites		5	8	None							
64	CQC/CQD		1	109	Small Arms	57600 9 MM simunition annual; 20000 5.56 simunition annual;						
				8	Small Arms	7200	9 MM		57600		2.00E-04	1.15E+01
				8	Small Arms	10000	5.56 Blank		20000		2.30E-04	4.60E+00
					Small Arms	4000 .38 cal	0.38 cal		4000		9.90E-04	3.96E+00
				8	Grenades (flash crash)	3	Grenades	M116A1	327		3.70E-04	1.21E-01
65	Communications		5	6	None							
66	Unmanned Aerial Vehicle (UAV) Training		5	12	none							
67	Around the World Training		1	6	none							
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and NSW Physical Fitness Training</b>												
68	Physical Training Runs		1	464	None	0						
69	Physical Conditioning Training Exercise		1	280	None	0						
70	Swim Training		1		None	0						
71	Hell Week		5	6	Smokes Grenade Simulators White Para Flares 7.62 Blank (A111) 50 CAL Blank	128 per year 200 per year 12 per year 27000 per year 2000 per year	Smoke Grenades Flares 7.62 mm 0.5 cal	M116A1 M127A1	128 200 12 27000 2000		8.40E-02 4.10E-03 3.80E-03 9.50E-04 2.10E-03	1.08E+01 8.20E-01 2.57E+01 4.20E+00
72	Rucksack March		1	54	None	0						
73	Monster Mash		1	6	None							
<b>4.12.6 Provide Industrial and Environmental Health Services</b>												
74	Conduct Environmental Health Site Assessment		3	3	None	0						
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>												
75	Conventional Ordnance/Improvised Explosive Device Response		1	64	0							
76	Land Mine Detection/Neutralization		1	24	0							
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>												
77	Field Training Exercise (FTX) e.g. SEAHAWK		14	53	0.50 cal blanks Grenades/flares	15650 per year 66 per year			15650 66		2.10E-03 4.10E-03	3.29E+01 2.71E-01

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	CO2	Emissions, lbs/year
											lbs/item	Total CO2
					M16 Rounds M60 Rounds 9mm Rounds	8250 per year 8250 per year 6600 per year			8250 8250 6600		7.80E-03 7.80E-03 2.00E-04	1.32E+00
<b>6.3.3 Combat Terrorism</b>												
78 Small Boat Attack			1	30	.50 cal rounds	350 per exercise			10500		2.10E-03	2.21E+01

Emissions, short tons/year  
 569.85162  
 0.28492581

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Number of vessels possible	Number of vessels assumed	Vessels per year	Ground Vehicles	Number of vehicles possible	Number of vehicles assumed	Vehicles per year	Aircraft	Number of aircraft possible	Number of aircraft assumed	Aircraft per year	Ordnance	Number of ordnance possible	Number of ordnance assumed
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring	1	72		RHIB Ship (DDG or CG)	1 1	1 1	72 72	None	0	0	0	None	0	0	0	None	0	0
2	Towing	1	30		Foss Tug Ship (DDG or CG)	1 1	1 1	30 30	None	0	0	0	None	0	0	0	None	0	0
3	Moor to Buoy	1	36		RHIB Ship (DDG or CG)	1 1	1 1	36 36	None	0	0	0	None	0	0	0	None	0	0
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations	1	228	10 to 20	RHIBs	2-4	3	684	4WD Pickups	2	456	SH60	1	1	228	Smoke Grenades/Flares	3		
5	MCM Operations	1	58	9	Zodiacs		1	58	4WD Pickups	2	116	None	0	0	0	Blast Caps/ Diver Recalls 10 - 20 lb Underwater Explosives	1	1	
6	Floating Mine Operations	1	53		RHIBs	2	2	106	4WD Pickups	1	1	53	SH-60 - 2 Hour 1	1	53	Blast Caps/ Diver Recalls Less than or equal to 5 lb	1	2 per training 1	
7	Dive Platoon	1	8		RHIB	2	2	16	None	0	0	0	SH-60 - 2 Hour 1	1	8	Blast Caps/Explosives 3.5 lb	8	9 per training 8 sequential command detonated	
8	Very Shallow Water (VSW) Operator Course	8	6	10	RHIBs / Water-Jet Driven Craft	2	2	12	None	0	0	0	None	0	0	0	Diver Recalls	2	2 per training
9	VSW Mine Countermeasure Operations	1	156	10 to 20	RHIBs / Water-Jet Driven Craft	2 to 3	3	468	None	0	0	0	None	0	0	0	Diver Recalls	2	2 per training
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations	1	156	5 to 10	RHIBs / Water-Jet Driven Craft Submersible	2-3 2	2 2	312 312	None	0	0	0	None	0	0	0	Blast Caps/ Diver Recalls	2	2 per training
11	MK8 Marine Mammal/MMS Operations	1	208	11 to 13	RHIBs / Water-Jet Driven Craft	2 to 4	4	832	4WD Pickups	0	0	0	None	0	0	0	13lbs [MK 87/88 C-4 in GRP 29lb [MK86/89 PBXN in AL canister]		Approximately 10% of training involves the setting of a 13- or 29-pound Approximately 10% of training involves the setting of a 13- or 29-pound
12	Mine Neutralization	1	4	16	RHIBs / Water-Jet Driven Craft		2	8	4WD Pickups	2	2	8	SH-60 - 2 Hour 1	1	4	Blast Caps/ Diver Recalls 3.5lb explosive	8	9 per training 8 sequential command detonated	
N1	Shock Wave Generator	1	90	20	CRRC LCM-8	1 1	1 1	90 90	4WD Pickups	1	1	90	None	0	0	0	Underwater Explosives (15 grams of PETN) Diver Recalls	1	1 command detonation 1 per training
N2	Surf Zone Test Detachment/Equipment T&E	1	200	10 to 20	RHIB / Water-Jet Driven Craft / CRRC	2	2	400	4WD Pickups	1	1	200	None	0	0	0	None	1	0
N3	UUV Neutralization	1	4		RHIBs		2	8	4WD Pickups	2	8	None	0	0	0	Explosives Seafox (3.3 lb PBXN9) Archerfish (3.57 lb PBXN10)	1 to 2 1 to 2	2 sequential charges of either 3.3 or 3.57 lbs 2 sequential charges of either 3.3 or 3.57 lbs	
N4	Mine Hunting																		
N5	Airborne Laser Mine Detection	1	200	4	Acoustic Explorer (mine seeding & mainten	1	1	200	None	0	0	0	SH-60 - 1.5 Hours cruise, 0.5 hours hover	1	1	200	None	0	0
N6	Organic Airborne Surface Influence Sweep	1	48	4	None	0	0	0	None	0	0	0	SH-60 - 1.5 Hours cruise, 0.5 hours hover	1	1	48	None	0	0
N7	Airborne Mine Neutralization	1	100	4	None	0	0	0	None	0	0	0	SH-60 - 1.5 Hours cruise, 0.5 hours hover	1	1	100	None	0	0
		1	48		RHIB	1	1	1	None	0	0	0	SH-60 - 1.5 Hours cruise, 0.5 hours hover	1	1	48	1.6 kg net explosive (PBXN110)	1	1 per training
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure	1	42		Foss Tug RHIB Ship (DDG or CG)	1 1 1	1 1 1	42 42 42	None	0	0	0	None	0	0	0	None	0	0
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling	1	94	28	CRRC	4	4	376	HMMWV	1	1	94	None	0	0	0	None	0	0
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	16	Personal Watercraft / CRRC / RHIB	1	1	189	HMMWV Truck	1 1	1 1	189 189	None	0	0	0	None	0	0
16	Basic Reconnaissance Course Final Mission	1	8	40 (in groups of 6 to 8)	IBS LCU	1 1	1 1	8 8	None	0	0	0	SH60	1	1	8	None	0	0
17	Obstacle Course	1	142	8 to 150	None	0	0	0	4WD Pickups	1-3	2	284	None	0	0	0	None	0	0
18	Hydrographic Reconnaissance	1	44	8 to 60	Personal Watercraft Small Water Craft RHIB / CRRC rigid, 10-meter craft	1 1 to 8 1 1	1 8 1 1	44 44 44 44	4WD Pickups	1-4	3	132	None	0	0	0	None	0	0
19	Surf Observations (SUROBS)	1	116	16 to 48	None	0	0	0	4WD Pickups	2	2	232	None	0	0	0	None	0	0
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function	1	72	28 to 60	CRRC/Zodiac/Propeller Surface Craft/RHIB Personal Watercraft	4 to 10 1	6 1	432 72	HMMWV/ 4WD Pickup	1 to 3	2	144	None	0	0	0	None		0
21	CRRC Towing and High Speed Maneuver	1	8	28	CRRC Personal Watercraft	4 1	4 1	32 8	4WD Pickups / HMMW	1	1	8	None	0	0	0	None	0	0
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean	1	24	28	CRRC Personal Watercraft RHIB LCU	4 1 1 1	4 1 1 1	96 24 24 24	4WD Pickups / HMMW	1	1	24	None	0	0	0	None	0	0

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Vessels			Ground Vehicles			Aircraft			Ordnance			Number of ordnance possible	Number of ordnance assumed
						Number of vessels possible	Number of vessels assumed	Vessels per year	Number of vehicles possible	Number of vehicles assumed	Vehicles per year	Number of aircraft possible	Number of aircraft assumed	Aircraft per year	Number of ordnance possible	Number of ordnance assumed			
23	CRRC Navigation, Bay and Ocean Runs	1	26	40	CRRC RHB	6	6	156	4WD Pickups / HMMW	1	26	None	0	0	0	None	0	0	
24	Amphibious Raid Course Final Mission	1	24	110-130	LCU CRRCs	2	2	48	None	0	0	None	0	0	0	None	0	0	
25	Amphibious Raid Operations	3	18	150 on foot, 20-40 additional	CRRCs LPD LCUs LCACs Submersibles EFV	10-15	13	234	HMMWVs 4WD Pickups AAVs LAVs IFAVs	4-8 5 to 10 4-8 4-8 4-8	6 8 6 6 6	108 144 108 108 108	CH-53E CH-46E UH-1N	2 to 4 4 1	3 4 1	54 72 18	Flares Grenades 9MM 5.56MM/38CAL Diver Recalls	3 20 1490 520/100 3	
26	Direct Action (DA) Operations	3	18	90 on foot, 20-40 additional	CRRCs LPD Submersibles	8-10	9	162	Light Wheeled Vehicle	11 to 20 16	288	CH-46E UH-1N	6 to 8 1	7 1	126 18	Explosives Smoke 9MM 5.56MM/38CAL Diver Recalls	10 3 1240 per year 430/90 per year 3 3		
27	Craft Landing Zone (CLZ)	1	4		1 LCAC per CLZ	1	1	4	HMMWVs	1	4	None	0	0	0	Smoke	3		
N8	Tactical Recovery of Aircraft and Personnel	1	4	10-20 monitor +1(0-20 aggressor)	None	0	0	0	4WD Pickups	5-8	9	CH-46E / CH-54 to 6 AH-1W UH-1N	3 1 1	12 4 4	Small Arms Smoke	5000 rds 50 cal/7.62 blanks 3			
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	86	80 to 20	RHBs / CRRCs Rigid, 10-meter craft	2 to 4	3	258	4WD Pickups	1-4	3	SH-60 Helo	1	1	86	Smokes/Flares/Surface Explosives Small Arms	3 flares, 10 grenades 6600/5000 .5 cal/7.62 mm		
29	Over-the-Beach Stalk	1	24		CRRCs Boston Whaler	1	1	24	4WD Pickups	1	1	SH-60 Helo	1	1	24	None			
30	Immediate Action Drills	1	12	Small groups of 8 to 10	RHBs CRRCs	1	1	12	4WD Pickups	4	4	SH-60 Helo	1	1	12	Smokes/Flares/Surface Small Arms	3 flares, 10 grenades 5000 rds 50 cal/7.62 blank, 6 times/yr		
31	Breacher Training	1	20	12 to 40	None	0	0	20	4WD Pickups	3	3	None	0	0	0	Small Arms	1400 rds 12 gauge shot, 6 times/yr		
32	Amphibious Warfare Exercise	1	84		RHBs MK V	2	2	168	None	0	0	None	0	0	0	Smoke Grenades/Flares	3		
33	Mobility Primary Mission Area	1	200		RHB or MK V	2 to 4	4	800	None	0	0	None	0	0	0	Smoke/Flares	3 per group		
34	Escape and Evasion	1	84		RHBs MK V	2	2	168	None	0	0	None	0	0	0	Smoke/Flares	3 per group		
N9	Underwater Demolition Qualification / Certification	1	12		RHBs or CRRC	2	2	24	4WD Pickups	2	2	None	0	0	0	12.5-13.75 pound (underwater) 25.5-pound (underwater)	2 1	two sequential 12.5-13.75 pound charges or a single 25.5-pound charge two sequential 12.5-13.75 pound charges or a single 25.5-pound charge	
N10	Vehicle Patrolling and Testing	1	50	20	None	0	0	0	HMMV	6	6	None	0	0	0	None	0	0	
N11	NSW Demolition Training: Demolition Requalifications	1	12	40	CRRCs	4	4	48	4WD Pickups	1	1	None	0	0	0	Blast Caps/Diver Recall 5-10 pounds of C-4	1	1	
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	8 to 50	RHBs CRRCs	1	1	154	4WD Pickups	2 to 4	2	SH60 CH46	1	1	154	Smoke Grenades/Flares	3		
36	Rappel and Fast Rope Training	1	11		None	0	0	0	4WD Pickups	4	44	NONE	0	0	0	None	0	0	
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy	14	40	20	RHBs	2	2	80	4WD Pickups	2	2	SH-60	1	40	≤ 10 lbs C-4 (underwater)	1	1		
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																			
38	OPDS	25	6	25 to 65	OUBs	1-5	2	12	HMMWVs 5-ton truck Dozer Comm Van RTV forklift LARCV	1 1 2 1 1 2	6 6 12 6 6 12	None	0	0	0	None	0	0	
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	65	Warping Tug Barge Ferry	1	1	5	HMMWVs 5-ton truck Van Dozers Rough Terrain Forklift LARCV	1 1 1 2 1 2	5 5 10 5 10	None	0	0	0	None	0	0	
40	Barge Ferry/Causeway Coxswain Training	3	54	up to 36	Barge Ferry	2	2	108	HMMWVs 5-ton truck Van Dozer LARCV	1 1 1 2 2	54 54 108 108	None	0	0	0	None	0	0	

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Number of vessels possible	Number of vessels assumed	Vessels per year	Ground Vehicles	Number of vehicles possible	Number of vehicles assumed	Vehicles per year	Aircraft	Number of aircraft possible	Number of aircraft assumed	Aircraft per year	Ordnance	Number of ordnance possible	Number of ordnance assumed	
41	Causeway Pier Insertion and Retraction	5	10	65 to 75	WTs	4	4	40	HMMWVs 5-ton truck Van Rough Terrain Forklift Dozers LARC V	2 1 1 1 2 2	2 1 1 1 2 2	20 10 10 10 20 20	None	0	0	0	None	0	0	
42	Elevated Causeway System (ELCAS)	10	4	75 to 125	WTs Personal Watercraft LCM	2 2 1	2 2 1	8 8 4	HMMWVs 5-ton truck Light Trucks Dozers Forklifts 75-Ton Crane Pile Driver ambulance water buffalo 140-ton crane 30-ton crane LARC V Air compressors Pile Extractor	3 to 4 1 to 3 4 2 1 2 2 1 1 2 2 2 2 1 1	4 3 4 2 1 2 2 1 1 1 2 2 2 1 1	16 12 16 8 4 8 8 4 4 8 8 8 8 4 4	None	0	0	0	None	0	0	
43	Establish Beach Party Command Post	4	16	19 on foot	None				HMMWVs 5-ton truck Dozer Generators/various Heaters LARC V	3 1 1 2 2 2	3 1 1 2 2 2	48 16 16 32 22 32	None	0	0	0	5.56 caliber rounds 7.62 caliber blanks	30 100		
44	Sterngate Marriage to Amphibious Ship/LCU	1	40		LCU	2	2	80	None	0	0	0	None	0	0	0	None	0	0	
45	LCU/LCM Beaching	1	60		LCU LCM-8	0 to 2 0 to 2	1 1	60 60	HMMWVs 5-ton truck Dozer LARC V	1 1 1 1	1 1 1 1	60 60 60 60	None	0	0	0	None	0	0	
46	LCU/LCM Towing/Being Towed	1	60		LCU LCM-8	2 2	2 2	120 120	Dozer	1	1	60	None	0	0	0	None	0	0	
47	Communications Training	2	2	60 persons, but they work in two shifts	None	0	0	0	4WD Pickups RTVs Bus Tractor with flat bed		4 4 2 1	8 8 4 2	None	0	0	0				
48	Field Training Exercise with a Beach Camp	14	2	19	None	2	4		HMMWVs 5-ton truck Dozer 4WD Pickups Fuel Truck 20-ton Stake Trucks 50-ton Low-bed Truck Wheeled Loaders Generators/various Heaters Welder LARC V	2 1 2 10 1 1 1 2 23 117 6 2	4 2 4 10 1 1 1 2 23 117 6 2	20 2 4 20 2 2 4 46 234 12 4	None	0	0	0	5.56 caliber rounds 7.62 caliber blanks	30 100		
49	Maritime Pre-positioning Ships (MPS) Offload	5	2	72	LCM-8 WTs Barge Ferry	2 2 2 1	4 4 4 2		HMMWVs 5-ton truck Dozer 4WD Pickups LARC V	2 1 1 3 1	4 2 2 6 2	4 2 2 6 2	None	0	0	0	None	0	0	
50	Reverse Osmosis Water Purification Unit	4	4	6	None	0	0	0	4WD Pickups RTVs Generator Flatbed Truck	2 6 1 1	8 24 4 4		None	0	0	0	None	0	0	
51	Roll-on/Roll-off Discharge Facility	5	2	40	WTs Personal Watercraft	2 2	4 4		HMMWVs/Jeeps 6-ton truck Dozer Cranes RTVs LARC V	3 1 1 2 2 2	6 2 2 4 4 4		None	0	0	0	None	0	0	
52	MPF Utility Boat Operator Course	9	2	15	MPF Utility Boat	2 2	2 2	4 4	Dozer Van LARC V	1 1 2	1 1 2	2 2 4	None	0	0	0	None	0	0	
53	LARC V Operator Training	6	1	10	None				LARC V	2	2	2	None	0	0	0	None	0	0	
<b>4.9.1 Conduct Mission Area Training NSW Diving and Beach Operations</b>																				
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving	1	126		RHIBs	5	5	630	4WD Pickups Bus	3 2	3 2	378 252	None	0	0	0	Diver Recall	1	1	
55	Open Circuit Breathing Diving	1	12	60	RHIBs LCU	5 1	5 1	60 12	4WD Pickups Bus	3 2	3 2	36 24	None	0	0	0	Diver Recall	1	1	
56	OTB Field Training Exercise	5	36	60	CRRCs	5	5	180	4WD Pickups	3	3	108	None	0	0	0	Small arm		15000 7.62mm; 19800 .5cal ANNUAL	
57	Rock Portage	1	20	60	CRRCs IBS	5 to 8 8 to 10	7 9	140 180	4WD Pickups	1	1	20	None	0	0	0	Smoke Grenades/Flares		3	
58	NSW Land Warfare Land Patrolling	1	18	60	None	0	0	0	4WD Pickups	2	2	36	None	0	0	0	None	0	0	

Scenario	Type Training	Reference Days (a)	Operations (b)	No. of Personnel	Ship/Boat Type	Number of vessels possible	Number of vessels assumed	Vessels per year	Ground Vehicles	Number of vehicles possible	Number of vehicles assumed	Vehicles per year	Aircraft	Number of aircraft possible	Number of aircraft assumed	Aircraft per year	Ordnance	Number of ordnance possible	Number of ordnance assumed
59	Immediate Action Drills	1	6	60	None	0	0	0	4WD Pickups	2	2	12	None	0	0	0	.5CAL/7.62 BLANK		5000 RNDs each per operation (30000 rounds each type annual)
<b>NSW Advanced Training</b>																			
60	Over the Beach Insertion / Photo Reconnaissance	1	31	20	RHIB/CRRC Kayak	2	1	31	4WD Pickup	2	2	62	None	0	0	0	Small arms/blanks		10 9 mm blanks; 10 5.56 blanks per operation
61	Photo Image Capture	14	4	20	None	0	0	0	4WD Pickups	2	2	28	None	0	0	0	Small arms/blanks		10 9 mm blanks; 10 5.56 blanks per operation
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	24	20	None	0	0	0	4WD Pickups	2	2	48	None	0	0	0	Small arms/blanks		10 9 mm blanks; 10 5.56 blanks per operation
63	Stalking, Movement and Hide-Sites	5	8	14	None	0	0	0	4WD Pickups	3	3	24	None	0	0	0	None	0	0
64	CQC/CQD	1	198	580	CRRCs		5		4WD Pickups		5	990	SH-60	1	1	198	Small Arms Small Arms Grenades (flash crash) Explosives (<1lb), accounted for in Breacher Training		104600 9 MM simunition; 36300 5.56 simunition; 7300 .38 cal 3
65	Communications	5	6	20	None	0	0	0	4WD Pickups	6	6	36	None	0	0	0	None	0	0
66	Unmanned Aerial Vehicle (UAV) Training	5	12	6	None	0	0	0	4WD Pickups	1	1	12	UAV	2	2	24	none	0	0
67	Around the World Training	1	6	60	CRRCs Sea Kayaks	7	7	42	4WD Pickups	4	4	24	None	0	0	0	none	0	0
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals NSW Physical Fitness Training</b>																			
68	Physical Training Runs	1	464	30 to 150 averaging 60	None	0	0	0	4WD Pickups	2-3	3	1392	None	0	0	0	None	0	0
69	Physical Conditioning Training Exercise	1	280	60 to 150 (avg 60)	CRRCs / Propeller Surface Craft	2-4	3	840	4WD Pickups	2	2	560	None	0	0	0	None	0	0
70	Swim Training	1	172	48-60	RHIBs	5	5	860	4WD Pickups	1	1	172	None	0	0	0	None	0	0
71	Hell Week	5	6	60	CRRCs	5	5	30	4WD Pickups	3	3	18	None	0	0	0	Smokes Grenade Simulators White Para Flares 7.62 Blank (A111) 50 CAL Blank		128 per year 200 per year 12 per year 27000 per year 2000 per year
72	Rucksack March	1	54	60	None	0	0	0	4WD Pickups	2-3	3	162	None	0	0	0	None	0	0
73	Monster Mash	1	6	60	CRRCs		3	18	4WD Pickups	3	3	18	None	0	0	0	None		
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																			
74	Conduct Environmental Health Site Assessment	3	3	14	None	0	0	0	4WD Pickups 5-ton truck 3/4-ton trailer small trailers	4 1 1 3	4 1 1 3	12 3 3 9	None	0	0	0	None	0	0
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																			
75	Conventional Ordnance/Improvised Explosive Device Response	1	120	9	None	0	0	0	4WD Pickups	2	2	240	None	0	0	0			
76	Land Mine Detection/Neutralization	1	45	8 to 10	None	0	0	0	4WD Pickups / Vans	2	2	90	None	0	0	0			
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																			
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	50-1000	Boston Whalers	0 to 24	12	144	4WD Pickups Generators Forklift	7 to 85 3 to 16 8	140 176 8	None	0	0	0	0.50 cal blanks Grenades/flares M16 Rounds M60 Rounds 9mm Rounds		15650 per year 66 per year 8250 per year 8250 per year 6600 per year	
<b>6.3.3 Combat Terrorism</b>																			
78	Small Boat Attack	1	36		Boston Whalers surface vessel dropping anchor and 3 shots 18' Bayliner	1 1 1	1 1 1	36 36 36	None	0	0	0	None	0	0	0	.50 cal rounds	350	350 per exercise
Totals		5343						12893				10966				1697			

(a) Days = the number of days per operation  
(b) Operations = the number of operations per year

Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Emissions Factors (lb/operation) (c)					Emissions (lbs)						
								Hours	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring		1	72	None	0													
2	Towing		1	30	None	0													
3	Moor to Buoy		1	36	None	0													
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations		1	228	SH60	1	1.0	7.50	7.68	0.66	0.48	5.04	1710	1751.04	150.48	109.44	1149.12		
5	MCM Operations		1	58	None	0													
6	Floating Mine Operations		1	53	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	795	814.08	69.96	50.88	534.24		
7	Dive Platoon		1	8	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	120	122.88	10.56	7.68	80.64		
8	Very Shallow Water (VSW) Operator Course		8	6	None	0													
9	VSW Mine Countermeasure Operations		1	156	None	0													
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations		1	156	None	0													
11	MK8 Marine Mammal/MMS Operations		1	208	None	0													
12	Mine Neutralization		1	4	SH-60 - 2 Hours	1	2.0	7.50	7.68	0.66	0.48	5.04	60	61.44	5.28	3.84	40.32		
N1	Shock Wave Generator		1	90	None	0													
N2	Surf Zone Test Detachment/Equipment T&E		1	200	None	0													
N3	UUV Neutralization		1	4	None	0													
N4	Mine Hunting		1	200	SH-60 - 1.5 Hours cruise	1	1.5	7.50	7.68	0.66	0.48	5.04	2250	2304	198	144	1512		
			1	200	Hover	1	0.5	1.63	2.44	0.19	0.14	1.48	162.9635	243.915	19.4425	14.14	148.47		
N5	Airborne Laser Mine Detection		1	48	SH-60 - 1.5 Hours cruise	1	1.5	7.50	7.68	0.66	0.48	5.04	540	552.96	47.52	34.56	362.88		
			1	48	Hover	1	0.5	1.63	2.44	0.19	0.14	1.48	39.11124	58.5396	4.6662	3.3936	35.6328		
N6	Organic Airborne Surface Influence Sweep		1	100	SH-60 - 1.5 Hours cruise	1	1.5	7.50	7.68	0.66	0.48	5.04	1125	1152	99	72	756		
			1	100	Hover	1	0.5	1.63	2.44	0.19	0.14	1.48	81.48175	121.9575	9.72125	7.07	74.235		
N7	Airborne Mine Neutralization		1	48	SH-60 - 1.5 Hours cruise	1	1.5	7.50	7.68	0.66	0.48	5.04	540	552.96	47.52	34.56	362.88		
			1	48	Hover	1	0.5	1.63	2.44	0.19	0.14	1.48	39.11124	58.5396	4.6662	3.3936	35.6328		
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure		1	42	None	0													
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling		1	94	None	0													
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None	0													
16	Basic Reconnaissance Course Final Mission		1	8	SH60	1	4.0	7.50	7.68	0.66	0.48	5.04	240	245.76	21.12	15.36	161.28		
17	Obstacle Course		1	142	None	0													
18	Hydrographic Reconnaissance		1	44	None	0													
19	Surf Observations (SUROBS)		1	116	None	0													
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function		1	72	None	0													
21	CRRC Towing and High Speed Maneuver		1	8	None	0													
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean		1	24	None	0													
23	CRRC Navigation, Bay and Ocean Runs		1	26	None	0													
24	Amphibious Raid Course Final Mission		1	24	None	0													
25	Amphibious Raid Operations		3	18	CH-53E	3	4.0	9.51	36.07	0.67	1.79	9.87	2054.16	7791.12	144.72	386.64	2131.92		
					CH-46E	4	4.0	22.109	4.41	3.84	0.45	1.99	6367.392	1270.08	1105.92	129.6	573.12		
					CH-53E T&G	3	1.0	0.77	2.11	0.13	0.11	0.61	41.58	113.94	7.02	5.94	32.94		
					CH-46E T&G	4	1.0	1.85	0.4	0.34	0.04	0.19	133.2	28.8	24.48	2.88	13.68		
					UH-1N	1	4.0	0.7	4.01	0.09	0.28	2.91	50.4	288.72	6.48	20.16	209.52		
26	Direct Action (DA) Operations		3	18	CH-46E	7	4.0	22.109	4.41	3.84	0.45	1.99	11142.94	2222.64	1935.36	226.8	1002.96		
					UH-1N	1	4.0	0.7	4.01	0.09	0.28	2.91	50.4	288.72	6.48	20.16	209.52		
27	Craft Landing Zone (CLZ)		1	4	None	0													
N8	Tactical Recovery of Aircraft and Personnel		1	4	CH-46E / CH-53E	3	4.0	22.109	4.41	3.84	0.45	1.99	1061.232	211.68	184.32	21.6	95.52		
			1	4	AH-1W	1	4.0	8.96	4.72	0.48	0.34	3.57	143.36	75.52	7.68	5.44	57.12		
			1	4	UH-1N	1	4.0	0.7	4.01	0.09	0.28	2.91	11.2	64.16	1.44	4.48	46.56		
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	86	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	2580	2641.92	227.04	165.12	1733.76		
29	Over-the-Beach Stalk		1	24	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	180	184.32	15.84	11.52	120.96		
30	Immediate Action Drills		1	12	SH-60 Helo	1	1.0	7.50	7.68	0.66	0.48	5.04	90	92.16	7.92	5.76	60.48		
31	Breacher Training		1	20	None	0													
32	Amphibious Warfare Exercise		1	84	None	0													
33	Mobility Primary Mission Area		1	200	None	0													
34	Escape and Evasion		1	84	None	0													
N9	Underwater Demolition Qualification / Certification		1	12	None	0													
N10	Vehicle Patrolling and Testing		1	50	None	0													

Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Emissions Factors (lb/operation) (c)					Emissions (lbs)					
								Hours	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
								N11	NSW Demolition Training: Demolition Requalifications and Training (Underwater Detonations)	1	12	None						
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																		
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	SH60	1	1.0	0.81	1.03	0.08	0.06	0.64	124.74	158.62	12.32	9.24	98.56		
36	Rappel and Fast Rope Training	1	11	NONE	0	1.0	1.87	0.39	0.35	0.04	0.19	287.98	60.06	53.9	6.16	29.26		
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy	14	40	SH-60	1	1.0	7.50	7.68	0.66	0.48	5.04	4200	4300.8	369.6	268.8	2822.4		
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																		
38	OPDS	25	6	None	0													
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	None	0													
40	Barge Ferry/Causeway Coxswain Training	3	54	None	0													
41	Causeway Pier Insertion and Retraction	5	10	None	0													
42	Elevated Causeway System (ELCAS)	10	4	None	0													
43	Establish Beach Party Command Post	4	16	None	0													
44	Sterngate Marriage to Amphibious Ship/LCU	1	40	None	0													
45	LCU/LCM Beaching	1	60	None	0													
46	LCU/LCM Towing/Being Towed	1	60	None	0													
47	Communications Training	2	2	None	0													
48	Field Training Exercise with a Beach Camp	14	2	None	0													
49	Maritime Pre-positioning Ships (MPS) Offload	5	2	None	0													
50	Reverse Osmosis Water Purification Unit	4	4	None	0													
51	Roll-on/Roll-off Discharge Facility	5	2	None	0													
52	MPF Utility Boat Operator Course	9	2	None	0													
53	LARC V Operator Training	6	1	None	0													
<b>4.9.1 Conduct Mission Area Training</b>																		
<b>NSW Diving and Beach Operations</b>																		
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving	1	126	None	0													
55	Open Circuit Breathing Diving	1	12	None	0													
56	OTB Field Training Exercise	5	36	None	0													
57	Rock Portage	1	20	None	0													
<b>NSW Land Warfare</b>																		
58	Land Patrolling	1	18	None	0													
59	Immediate Action Drills	1	6	None	0													
<b>NSW Advanced Training</b>																		
60	Over the Beach Insertion / Photo Reconnaissance	1	31	None	0													
61	Photo Image Capture	14	4	None	0													
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	24	None	0													
63	Stalking, Movement and Hide-Sites	5	8	None	0													
64	CQC/CQD	1	198	SH-60	1	3.0	7.5	7.68	0.66	0.48	5.04	6890.4	5235.12	669.24	344.52	3449.16		
65	Communications	5	6	None	0													
66	Unmanned Aerial Vehicle (UAV) Training	5	12	UAV	2													
67	Around the World Training	1	6	None	0													
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals</b>																		
<b>NSW Physical Fitness Training</b>																		
68	Physical Training Runs	1	464	None	0													
69	Physical Conditioning Training Exercise	1	280	None	0													
70	Swim Training	1	172	None	0													
71	Hell Week	5	6	None	0													
72	Rucksack March	1	54	None	0													
73	Monster Mash	1	6	None	0													
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																		
74	Conduct Environmental Health Site Assessment	3	3	None	0													
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																		
75	Conventional Ordnance/Improvised Explosive Device Response	1	120	None														
76	Land Mine Detection/Neutralization	1	45	None														
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																		
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	None	0													

Scenario Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Emissions Factors (lb/operation) (c)					Emissions (lbs)							
							Hours	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM		
6.3.3 Combat Terrorism																			
78 Small Boat Attack		1	36	None	0														
							pounds/year	43111.648	33068.452	5467.6962	2135.1372	17940.771							
							tons/year	21.56	16.53	2.73	1.07	8.97							

Assumptions: Assume that SH-60 and CH-46 operation for Cast and Recovery are Special Personnel Insertion and Extraction Rig operations.

Assume 4 hours of cruise time for Amphibious Raid Operations, and one touch and go operation

SH60 from AESO Memorandum Report No. 9929, February 1999

CH53 from AESO Memorandum Report No. 9822 Rev C, February 2000

CH46 from AESO Memorandum Report No. 9816 Rev F, January 2001

UH1N from AESO Memorandum Report No. 9904 Rev A, May 1999

AH-1W from AESO Memorandum Report No. 9824 Rev A, April 1999

Assume Aircraft participate for one day during Amphibious Raid Operations and Direct Action Operations

Assume 1 LTO and 3 hours of cruise for CQC/CQD SH-60 operation.

(a) Days = the number of days per operation

(b) Operations = the number of operations per year



Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)				Ave. Speed (knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)					
						Hours	Propulsion	No.	Generator					No.	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
<b>1.1.2 Conduct Maneuver - Move Forces</b>																								
1	Anchoring	1	72	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	11.52	457.92	2.88	48.96	5.76
		1	72	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	102.98	47.34	8.10	17.04	2.35	29658.24	13633.92	2332.8	4907.52	676.8
2	Towing	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	221.44713	1306.538	166.0853	3930.686	788.9054
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	102.98	47.34	8.10	17.04	2.35	12357.6	5680.8	972	2044.8	282
3	Moor to Buoy	1	36	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	5.76	228.96	1.44	24.48	2.88
		1	36	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	102.98	47.34	8.10	17.04	2.35	14829.12	6816.96	1166.4	2453.76	338.4
<b>1.3.1 Perform Mine Countermeasures</b>																								
4	Parachute Operations	1	228	RHIBs	3	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	109.44	4350.24	27.36	465.12	54.72
5	MCM Operations	1	58	Zodiacs	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	2083.9542	199.4497	1194.448	0.50636	286.4312
6	Floating Mine Operations	1	53	RHIBs	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	16.96	674.16	4.24	72.08	8.48
7	Dive Platoon	1	8	RHIB	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	2.56	101.76	0.64	10.88	1.28
8	Very Shallow Water (VSW) Operator Course	8	6	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	7.68	305.28	1.92	32.64	3.84
9	VSW Mine Countermeasure Operations	1	156	RHIBs / Water-Jet Driven Craft	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	37.44	1488.24	9.36	159.12	18.72
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio	1	156	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	24.96	992.16	6.24	106.08	12.48
		1	156	Submersible	2	2																		
11	MK8 Marine Mammal/MMS Operations	1	208	RHIBs / Water-Jet Driven Craft	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	66.56	2645.76	16.64	282.88	33.28
12	Mine Neutralization	1	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	0.64	25.44	0.16	2.72	0.32
N1	Shock Wave Generator	1	90	CRRC	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	3233.7221	309.4909	1853.454	0.785732	444.4622
		1	90	LCM-8	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	13035.6	16182	187.2	1119.6	565.2
N2	Surf Zone Test Detachment/Equipment T&E	1	200	RHIB / Water-Jet Driven Craft / CRRC	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	64	2544	16	272	32
N3	UUV Neutralization	1	4	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	0.64	25.44	0.16	2.72	0.32
N4	Mine Hunting	2	6	Acoustic Explorer (mine seeding & maint	1	12	GM-16-V-92N Diesel	2	GM Detroit Diesel 6-71, 75 kW	2	3	30% 550 rpm	2	49 kW	7.31	8.46	0.38	2.12	0.55	1052.64	1218.24	54.72	305.28	79.2
N5	Airborne Laser Mine Detection	1	48	None																				
N6	Organic Airborne Surface Influence Sweep	1	100	None																				
N7	Airborne Mine Neutralization	1	48	RHIB	1	12	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	23.04	915.84	5.76	97.92	11.52
<b>1.4.6 Conduct Maritime Interception</b>																								
13	Visit, Board, Search and Seizure	1	42	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	310.02598	1829.153	232.5195	5502.961	1104.468
		1	42	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	6.72	267.12	1.68	28.56	3.36
		1	42	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	102.98	47.34	8.10	17.04	2.35	17300.64	7953.12	1360.8	2862.72	394.8
<b>1.5.4 Conduct Amphibious Operations</b>																								
14	Small Boat Handling	1	94	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	20264.658	1939.477	11614.98	4.923918	2785.296
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	Personal Watercraft / CRRC / RHIB	1	1	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	4938.7755	472.6771	2830.729	1.200026	678.815
16	Basic Reconnaissance Course Final Mission	1	8	IBS	1	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	431.16294	41.26546	247.1271	0.104764	59.26162
		1	8	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	1738.08	2157.6	24.96	149.28	75.36
17	Obstacle Course	1	142	None																				
18	Hydrographic Reconnaissance	1	44	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	6898.6071	660.2474	3954.034	1.676227	948.186
		1	44	Small Water Craft	8	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	18971.17	1815.68	10873.59	4.609625	2607.511
		1	44	RHIB / CRRC	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	10.56	419.76	2.64	44.88	5.28
		1	44	rigid, 10-meter craft	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	10.56	419.76	2.64	44.88	5.28
19	Surf Observations (SUROBS)	1	116	None																				

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)				Engines and Generators	Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)						
							Hours		Propulsion							Generator		CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
									No.	No.						No.	No.										
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ 1	72	CRRC/Zodiac/Propeller Surface Craft/Rt	6	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	23282.799	2228.335	13344.87	5.657268	3200.128			
		1	Personal Watercraft	1	6	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	11288.63	1080.405	6470.238	2.742918	1551.577			
21	CRRC Towing and High Speed Maneuver	1	CRRC	4	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	1724.6518	165.0618	988.5086	0.419057	237.0465			
		1	Personal Watercraft	1	6	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	1254.2922	120.045	718.9153	0.304769	172.3975			
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay 1	24	CRRC	4	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	5173.9553	495.1855	2965.526	1.257171	711.1395			
		1	Personal Watercraft	1	6	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	3762.8766	360.1349	2156.746	0.914306	517.1924			
		1	RHIB	1	6	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	5.76	228.96	1.44	24.48	2.88			
		1	LCU	1	6	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	5214.24	6472.8	74.88	447.84	226.08			
23	CRRC Navigation, Bay and Ocean Runs	1	CRRC	6	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	8407.6774	804.6765	4818.979	2.042902	1155.602			
		1	RHIB	1	6	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	6.24	248.04	1.56	26.52	3.12			
24	Amphibious Raid Course Final Mission	1	LCU	2	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	3476.16	4315.2	49.92	298.56	150.72			
		1	CRRCs	12	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	5173.9553	495.1855	2965.526	1.257171	711.1395			
25	Amphibious Raid Operations	3	CRRCs	13	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	4203.8387	402.3382	2409.49	1.021451	577.8008			
		3	LPD	1	2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	66.434138	391.9614	49.8256	1179.206	236.6716			
		3	LCUs	2	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	2607.12	3236.4	37.44	223.92	113.04			
		3	LCACs	2	2	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	25.41	55.32	0.72	43.30	3.89	1829.52	3983.04	51.84	3117.6	280.08			
26	Direct Action (DA) Operations	3	CRRCs	9	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	2910.3499	278.5419	1668.108	0.707158	400.016			
		3	LPD	1	2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	66.434138	391.9614	49.8256	1179.206	236.6716			
27	Craft Landing Zone (CLZ)	1	1 LCAC per CLZ	1	2	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	25.41	55.32	0.72	43.30	3.89	203.28	442.56	5.76	346.4	31.12			
N8	Tactical Recovery of Aircraft and Personnel	1	None																								
<b>1.5.7 Conduct Naval Special Warfare</b>																											
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	86 RHIBs / CRRCs	3	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	82.56	3281.76	20.64	350.88	41.28			
		4	Rigid, 10-meter craft	1	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	27.52	1093.92	6.88	116.96	13.76			
29	Over-the-Beach Stalk	1	CRRCs	1	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	431.16294	41.26546	247.1271	0.104764	59.26162			
		1	Boston Whaler	1	2	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	8.982561	0.859697	5.148482	0.002183	1.234617	431.16294	41.26546	247.1271	0.104764	59.26162			
30	Immediate Action Drills	1	RHIBs	1	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	0.96	38.16	0.24	4.08	0.48			
		1	CRRCs	1	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	215.58147	20.63273	123.5636	0.052382	29.63081			
31	Breacher Training	1	None	0																							
32	Amphibious Warfare Exercise	1	84 RHIBs	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	13.44	534.24	3.36	57.12	6.72			
		1	MK V	2	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	1.94	14.83	0.50	2.39	0.20	651.84	4982.88	168	803.04	67.2			
33	Mobility Primary Mission Area	1	200 RHIB or MK V	4	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	64	2544	16	272	32			
34	Escape and Evasion	1	84 RHIBs	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	13.44	534.24	3.36	57.12	6.72			
		1	MK V	2	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	1.94	14.83	0.50	2.39	0.20	651.84	4982.88	168	803.04	67.2			
N9	Underwater Demolition Qualification / Certification	1	12 RHIBs or CRRC	2	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	1.92	76.32	0.48	8.16	0.96			
N10	Vehicle Patrolling and Testing	1	50 None																								
N11	NSW Demolition Training: Demolition Requalifications and Training	1	12 CRRCs	4	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	862.32589	82.53092	494.2543	0.209528	118.5232			
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																											
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154 RHIBs	1	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	12.32	489.72	3.08	52.36	6.16			

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Emissions Factors (lb/hr) (c)					Emissions, (lbs/year)					
								Hours	Propulsion	No.	Generator					No.	CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
36	Rappel and Fast Rope Training	1	154	CRRCs		2	2	OMC Outboard, 55 hp (d)	1	None		0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	5533.2578	529.5734	3171.465	1.344474	760.5242
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASD)	14	40	RHIBs		2	2	Caterpillar 3126 Diesels	2	None		0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	89.6	3561.6	22.4	380.8	44.8
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																										
38	OPDS	25	6	OUBs		2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	43452	53940	624	3732	1884
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	Warping Tug		1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	369.07854	2177.563	276.8089	6551.144	1314.842
		10	5	Barge Ferry		2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	738.15708	4355.127	553.6178	13102.29	2629.685
40	Barge Ferry/Causeway Coxswain Training	3	54	Barge Ferry		2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	2391.629	14110.61	1793.722	42451.41	8520.178
41	Causeway Pier Insertion and Retraction	5	10	WTs		4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	1476.3142	8710.254	1107.236	26204.58	5259.369
42	Elevated Causeway System (ELCAS)	10	4	WTs		2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	590.52567	3484.101	442.8943	10481.83	2103.748
		10	4	Personal Watercraft		2	4	Yamaha Outboard, 160 hp (d)	1	None		0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	8361.948	800.2998	4792.769	2.031791	1149.316
		10	4	LCM		1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	5793.6	7192	83.2	497.6	251.2
43	Establish Beach Party Command Post	4	16	None																						
44	Sterngate Marriage to Amphibious Ship/LCU	1	40	LCU		2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	11587.2	14384	166.4	995.2	502.4
45	LCU/LCM Beaching	1	60	LCU		1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	8690.4	10788	124.8	746.4	376.8
		1	60	LCM-8		1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	8690.4	10788	124.8	746.4	376.8
46	LCU/LCM Towing/Being Towed	1	60	LCU		2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	17380.8	21576	249.6	1492.8	753.6
		1	60	LCM-8		2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	17380.8	21576	249.6	1492.8	753.6
47	Communications Training	2	2	None																						
48	Field Training Exercise with a Beach Camp	14	2	None																						
49	Maritime Pre-positioning Ships (MPS) Offload	5	2	LCM-8		2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW		2	10	2000 rpm (97%)	2	2@ 7kW ea	36.21	44.95	0.52	3.11	1.57	1448.4	1798	20.8	124.4	62.8
		5	2	WTs		2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	73.815708	435.5127	55.36178	1310.229	262.9685
		5	2	Barge Ferry		2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	73.815708	435.5127	55.36178	1310.229	262.9685
50	Reverse Osmosis Water Purification Unit	4	4	None																						
51	Roll-on/Roll-off Discharge Facility	5	2	WTs		2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions		0	7	25%	2	NA	1.85	10.89	1.38	32.76	6.57	73.815708	435.5127	55.36178	1310.229	262.9685
		5	2	Personal Watercraft		2	2	Yamaha Outboard, 160 hp (d)	1	None		0	2	100%	1	NA	26.13109	2.500937	14.9774	0.006349	3.591614	1045.2435	100.0375	599.0961	0.253974	143.6645
52	MPF Utility Boat Operator Course	9	2	MPF Utility Boat		2	4	Diesel Engines	2	None		0	2	660	2	NA	20.46	4.4088	1.659306	1.353	1.452	2946.24	634.8672	238.9401	194.832	209.088
53	LARC V Operator Training	6	1	None																						
<b>4.9.1 Conduct Mission Area Training</b>																										
<b>NSW Diving and Beach Operations</b>																										
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divir	1	126	RHIBs		5	2	Caterpillar 3126 Diesels	2	None		0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	50.4	2003.4	12.6	214.2	25.2
55	Open Circuit Breathing Diving	1	12	RHIBs		5	2	Caterpillar 3126 Diesels	2	None		0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	4.8	190.8	1.2	20.4	2.4
				LCU		1																				
56	OTB Field Training Exercise	5	36	CRRCs		5	2	assume paddling																		
57	Rock Portage	1	20	CRRCs		7	2	assume paddling																		
		1	20	IBS		9	2	OMC Outboard, 55 hp (d)	1	None		0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	3233.7221	309.4909	1853.454	0.785732	444.4622
<b>NSW Land Warfare</b>																										
58	Land Patrolling	1	18	None																						
59	Immediate Action Drills	1	6	None																						
<b>NSW Advanced Training</b>																										
60	Over the Beach Insertion / Photo Reconnaissance	1	31	RHIB/CRRC		1	2	Caterpillar 3126 Diesels	2	None		0	1-2	600	2	NA	0.04	1.59	0.01	0.17	0.02	2.48	98.58	0.62	10.54	1.24
		1	31	Kayak		1	2	assume paddling																		
61	Photo Image Capture	14	4	None																						
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	24	None																						
63	Stalking, Movement and Hide-Sites	5	8	None																						
64	CQC/CQD	1	198	CRRCs		5	2	OMC Outboard, 55 hp (d)	1	None		0	2	600-800	1	NA	8.982561	0.859697	5.148482	0.002183	1.234617	17785.471	1702.2	10193.99	4.321524	2444.542



Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)				
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring	1	72	None															
2	Towing	1	30	None															
3	Moor to Buoy	1	36	None															
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations	1	228	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	184.22	15.41	11.04	0.21	0.93
5	MCM Operations	1	58	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	46.86	3.92	2.81	0.05	0.24
6	Floating Mine Operations	1	53	4WD Pickups	1		2			0.20	0.02	0.01	0.00	0.00	21.41	1.79	1.28	0.02	0.11
7	Dive Platoon	1	8	None															
8	Very Shallow Water (VSW) Operator Course	8	6	None															
9	VSW Mine Countermeasure Operations	1	156	None															
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations	1	156	None															
11	MK8 Marine Mammal/MMS Operations	1	208	4WD Pickups	0		2			0.20	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Mine Neutralization	1	4	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
N1	Shock Wave Generator	1	90	4WD Pickups	1		2			0.20	0.02	0.01	0.00	0.00	36.36	3.04	2.18	0.04	0.18
N2	Surf Zone Test Detachment/Equipment T&E	1	200	4WD Pickups	1		2			0.20	0.02	0.01	0.00	0.00	80.80	6.76	4.84	0.09	0.41
N3	UUV Neutralization	1	4	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
N4	Mine Hunting	1	200	None															
N5	Airborne Laser Mine Detection	1	48	None															
N6	Organic Airborne Surface Influence Sweep	1	100	None															
N7	Airborne Mine Neutralization	1	48	None															
<b>1.4.6 Conduct Maritime Interception</b>																			
13	Visit, Board, Search and Seizure	1	42	None															
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling	1	94	HMMWV	1	65%	3			0.18	2.06	0.60	0.19	0.17	33.88	378.24	110.32	35.07	31.52
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	HMMWV	1	65%	3			0.18	2.06	0.60	0.19	0.17	68.13	760.51	221.82	70.51	63.38
		1	189	Truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	37.08	45.03	3.20	0.07	2.16
16	Basic Reconnaissance Course Final Mission	1	8	None															
17	Obstacle Course	1	142	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	114.74	9.60	6.87	0.13	0.58
18	Hydrographic Reconnaissance	1	44	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	53.33	4.46	3.19	0.06	0.27
19	Surf Observations (SUROBS)	1	116	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	93.73	7.84	5.61	0.11	0.48
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function	1	72	HMMWV/ 4WD Pickups	2	65%	3			0.18	2.06	0.60	0.19	0.17	51.91	579.44	169.00	53.72	48.29
21	CRRC Towing and High Speed Maneuver	1	8	4WD Pickups / HMMWV	1		2			0.20	0.02	0.01	0.00	0.00	3.23	0.27	0.19	0.00	0.02
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean	1	24	4WD Pickups / HMMWV	1		2			0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05
23	CRRC Navigation, Bay and Ocean Runs	1	26	4WD Pickups / HMMWV	1		8			0.20	0.02	0.01	0.00	0.00	42.02	3.52	2.52	0.05	0.21
24	Amphibious Raid Course Final Mission	1	24	None	0														
25	Amphibious Raid Operations	3	18	HMMWVs	6	65%	3			0.18	2.06	0.60	0.19	0.17	116.79	1303.74	380.26	120.87	108.64
		3	18	4WD Pickups	8		8			0.20	0.02	0.01	0.00	0.00	698.11	58.41	41.82	0.80	3.54
		3	18	AAVs	6		2			0.444918	1.0	0.2	0.1	0.2	288.31	671.38	112.81	33.36	116.07
		3	18	LAVs	6	65%	2			0.04	0.06	0.01	0.00	0.01	18.60	27.28	3.60	0.07	2.55
		3	18	IFAVs	6	65%	2			0.04	0.06	0.01	0.00	0.01	18.60	27.28	3.60	0.07	2.55
26	Direct Action (DA) Operations	3	18	Light Wheeled Vehicles	16		2			0.20	0.02	0.01	0.00	0.00	349.06	29.20	20.91	0.40	1.77
27	Craft Landing Zone (CLZ)	1	4	HMMWVs	1	65%	3			0.18	2.06	0.60	0.19	0.17	1.44	16.10	4.69	1.49	1.34
N8	Tactical Recovery of Aircraft and Personnel	1	4	4WD Pickups	9		2			0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Rafting Craft Over-the-Beach	4	86	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	416.93	34.88	24.97	0.48	2.12
29	Over-the-Beach Stalk	1	24	4WD Pickups	1		2			0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05
30	Immediate Action Drills	1	12	4WD Pickups	4		2			0.20	0.02	0.01	0.00	0.00	19.39	1.62	1.16	0.02	0.10
31	Breacher Training	1	20	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	24.24	2.03	1.45	0.03	0.12
32	Amphibious Warfare Exercise	1	84	None	0														
33	Mobility Primary Mission Area	1	200	None	0														
34	Escape and Evasion	1	84	None	0														
N9	Underwater Demolition Qualification / Certification	1	12	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	9.70	0.81	0.58	0.01	0.05
N10	Vehicle Patrolling and Testing	1	50	HMMV	6	65%	3			0.18	2.06	0.60	0.19	0.17	108.14	1207.16	352.09	111.91	100.60
N11	NSW Demolition Training: Demolition Requalifications and Training (Underwater Detonations)	1	12	4WD Pickups	1		2			0.20	0.02	0.01	0.00	0.00	4.85	0.41	0.29	0.01	0.02
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	124.43	10.41	7.45	0.14	0.63
36	Rappel and Fast Rope Training	1	11	4WD Pickups	4		2			0.20	0.02	0.01	0.00	0.00	17.78	1.49	1.06	0.02	0.09
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy	14	40	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	452.48	37.86	27.10	0.52	2.30
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																			
38	OPDS	25	6	HMMWVs	1	65%	3			0.18	2.06	0.60	0.19	0.17	54.07	603.58	176.04	55.96	50.30
		25	6	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	29.43	35.74	2.54	0.06	1.72
		25	6	Dozer	2	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	1955.47	6211.06	696.78	4.50	368.62
		25	6	Comm Van	1		8			0.20	0.02	0.01	0.00	0.00	242.40	20.28	14.52	0.28	1.23
		25	6	RTV forklift	1	48%	8	93.0		0.01	0.02	0.00	0.00	0.00	483.83	882.35	149.59	0.82	80.64
		25	6	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	6510.00	1402.80	527.96	430.50	462.00
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	HMMWVs	1	65%	3			0.18	2.06	0.60	0.19	0.17	18.02	201.19	58.68	18.65	16.77
		10	5	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	9.81	11.91	0.85	0.02	0.57
		10	5	Van	1		8			0.20	0.02	0.01	0.00	0.00	80.80	6.76	4.84	0.09	0.41
		10	5	Dozers	2	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	651.82	2070.35	232.26	1.50	122.87
		10	5	Rough Terrain Forklift	1	48%	8	37.0		0.01	0.02	0.00	0.00	0.00	64.84	118.25	20.05	0.11	10.81
		10	5	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	2170.00	467.60	175.99	143.50	154.00
40	Barge Ferry/Causeway Coxswain Training	3	54	HMMWVs	1	65%	3			0.18	2.06	0.60	0.19	0.17	58.40	651.87	190.13	60.43	54.32
		3	54	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	31.78	38.59	2.74	0.06	1.85
		3	54	Van	1		8			0.20	0.02	0.01	0.00	0.00	98.17	21.90	15.68	0.30	1.33
		3	54	Dozer	2	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	2111.91	6707.94	752.52	4.85	398.11
		3	54	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175</						

Scenario	Type Training	Reference Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)					
									CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
42 Elevated Causeway System (ELCAS)		10	4	HMMWVs	4	65%	3			0.18	2.06	0.60	0.19	0.17	57.68	643.82	187.78	59.69	53.65
		10	4	5-ton truck	3	80%	1			0.25	0.30	0.02	0.00	0.01	23.54	28.59	2.03	0.04	1.37
		10	4	Light Trucks	4	62%	8			0.01	0.02	0.00	0.00	0.00	983.08	1943.63	278.87	255.54	194.36
		10	4	Dozers	2	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	521.46	1656.28	185.81	1.20	98.30
		10	4	Forklifts	1	48%	8	37.0		0.01	0.02	0.00	0.00	0.00	51.87	94.60	16.04	0.09	8.65
		10	4	75-Ton Crane	2	74%	8	194.0		0.00	0.02	0.00	0.00	0.00	397.01	1423.98	141.79	1.22	54.69
		10	4	Pile Driver	2	30%	24	20.0		0.01	0.01	0.00	0.00	0.00	60.95	121.15	19.05	0.18	7.21
		10	4	ambulance	1		8			0.20	0.02	0.01	0.00	0.00	64.64	5.41	3.87	0.07	0.33
		10	4	water buffalo	1	80%	1			0.25	0.30	0.02	0.00	0.01	7.85	9.53	0.68	0.01	0.46
		10	4	140-ton crane	1	74%	8	399.0		0.00	0.02	0.00	0.00	0.00	408.27	1464.36	145.81	1.25	56.24
		10	4	30-ton crane	2	74%	8	194.0		0.00	0.02	0.00	0.00	0.00	397.01	1423.98	141.79	1.22	54.69
		10	4	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	1736.00	374.08	140.79	114.80	123.20
		10	4	Air compressors	2	48%	8	106.0		0.01	0.02	0.00	0.00	0.00	292.90	557.09	94.76	0.50	49.25
		10	4	Pile Extractor	1	30%	24	20.0		0.01	0.01	0.00	0.00	0.00	30.48	60.57	9.52	0.09	3.61
43 Establish Beach Party Command Post		4	16	HMMWVs	3	65%	3			0.18	2.06	0.60	0.19	0.17	69.21	772.58	225.34	71.63	64.38
		4	16	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	12.55	15.25	1.08	0.02	0.73
		4	16	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	417.17	1325.03	148.65	0.96	78.64
		4	16	Generators/various	2	30%	24	Various		11.98	55.59	4.52	3.67	3.93	5519.25	25617.23	2084.62	1689.14	1809.07
	4	16	Heaters	2	51%	8	238.0		0.00	0.02	0.00	0.00	0.00	463.10	1866.08	172.63	1.64	64.67	
	4	16	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	2777.60	598.53	225.26	183.68	197.12	
44 Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0														
45 LCU/LCM Beaching		1	60	HMMWVs	1	65%	3			0.18	2.06	0.60	0.19	0.17	21.63	241.43	70.42	22.38	20.12
		1	60	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	11.77	14.29	1.01	0.02	0.69
	1	60	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	391.09	1242.21	139.36	0.90	73.72	
	1	60	LARCV	1		2	350.0		10.85	2.338	0.879935	0.7175	0.77	1302.00	280.56	105.59	86.10	92.40	
46 LCU/LCM Towing/Being Towed		1	60	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	391.09	1242.21	139.36	0.90	73.72
47 Communications Training		2	2	4WD Pickups	4		2			0.20	0.02	0.01	0.00	0.00	6.46	0.54	0.39	0.01	0.03
		2	2	RTVs	4	48%	8	93.0		0.01	0.02	0.00	0.00	0.00	51.61	94.12	15.96	0.09	8.60
		2	2	Bus	2		2			0.21	0.74	0.04	0.00	0.02	3.28	11.85	0.66	0.01	0.27
		2	2	Tractor with flat bed	1	80%	1			0.25	0.30	0.02	0.00	0.01	0.78	0.95	0.07	0.00	0.05
48 Field Training Exercise with a Beach Camp		14	2	HMMWVs	2	65%	3			0.18	2.06	0.60	0.19	0.17	20.19	225.34	65.72	20.89	18.78
		14	2	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	5.49	6.67	0.47	0.01	0.32
		14	2	Dozer	2	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	365.02	1159.40	130.07	0.84	68.81
		14	2	4WD Pickups	10		2			0.20	0.02	0.01	0.00	0.00	113.12	9.46	6.78	0.13	0.57
		14	2	Fuel Truck	1		2			0.20	0.02	0.01	0.00	0.00	11.31	0.95	0.68	0.01	0.06
		14	2	20-ton Stake Trucks	1		2			0.10	0.46	0.02	0.01	0.02	5.77	25.64	1.00	0.33	1.04
		14	2	50-ton Low-bed Trucks	1		2			0.10	0.46	0.02	0.01	0.02	5.77	25.64	1.00	0.33	1.04
		14	2	Wheeled Loaders	2	47%	8	147.0		0.01	0.02	0.00	0.00	0.00	230.22	470.56	60.09	0.41	26.46
		14	2	Generators/various	23	30%	24	Various		11.98	55.59	4.52	3.67	3.93	2414.67	11207.54	912.02	739.00	791.47
		14	2	Heaters	117	51%	8	238.0		0.00	0.02	0.00	0.00	0.00					
	14	2	Welder	6	45%	8	45.0		0.01	0.01	0.01	0.00	0.00	403.21	363.61	171.60	0.42	39.72	
	14	2	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	1215.20	261.86	98.55	80.36	86.24	
49 Maritime Pre-positioning Ships (MPS) Offload		5	2	HMMWVs	2	65%	3			0.18	2.06	0.60	0.19	0.17	7.21	80.48	23.47	7.46	6.71
		5	2	5-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	1.96	2.38	0.17	0.00	0.11
		5	2	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	65.18	207.04	23.23	0.15	12.29
		5	2	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	12.12	1.01	0.73	0.01	0.06
		5	2	LARCV	1		2	350.0		10.85	2.338	0.879935	0.7175	0.77	217.00	46.76	17.60	14.35	15.40
50 Reverse Osmosis Water Purification Unit		4	4	4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	12.93	1.08	0.77	0.01	0.07
		4	4	RTVs	6	48%	8	93.0		0.01	0.02	0.00	0.00	0.00	309.65	564.70	95.74	0.52	51.61
		4	4	Generator	1	74%	8	22.0		0.01	0.01	0.00	0.00	0.00	12.41	18.84	6.66	4.17	2.76
		4	4	Flatbed Truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	3.14	3.81	0.27	0.01	0.18
51 Roll-on/Roll-off Discharge Facility		5	2	HMMWVs/Jeeps	3	65%	3			0.18	2.06	0.60	0.19	0.17	10.81	120.72	35.21	11.19	10.06
		5	2	6-ton truck	1	80%	1			0.25	0.30	0.02	0.00	0.01	1.96	2.38	0.17	0.00	0.11
		5	2	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	65.18	207.04	23.23	0.15	12.29
		5	2	Cranes	2	43%	8	194.0		0.00	0.02	0.00	0.00	0.00	57.67	206.86	20.60	0.18	7.94
		5	2	RTVs	2	48%	8	93.0		0.01	0.02	0.00	0.00	0.00	64.51	117.65	19.95	0.11	10.75
		5	2	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	434.00	93.52	35.20	28.70	30.80
		9	2	Dozer	1	59%	8	240.0		0.01	0.02	0.00	0.00	0.00	117.33	372.66	41.81	0.27	22.12
52 MPF Utility Boat Operator Course		9	2	Van	1		2			0.20	0.02	0.01	0.00	0.00	7.27	0.61	0.44	0.01	0.04
		9	2	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	781.20	168.34	63.36	51.66	55.44
		9	2	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	781.20	168.34	63.36	51.66	55.44
53 LARC V Operator Training		6	1	LARCV	2		2	350.0		10.85	2.338	0.879935	0.7175	0.77	260.40	56.11	21.12	17.22	18.48
<b>4.9.1 Conduct Mission Area Training</b>																			
<b>NSW Diving and Beach Operations</b>																			
54 Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving		1	126	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	152.71	12.78	9.15	0.17	0.77
		1	126	Bus	2		2			0.21	0.74	0.04	0.00	0.02	103.32	373.26	20.71	0.43	8.42
55 Open Circuit Breathing Diving		1	12	4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07
		1	12	Bus	2		2			0.21	0.74	0							

Table C-13  
Ground Vehicle Emissions  
Alternatives 1 and 2

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)					Emissions (lbs)					
										CO	NOx	ROG	SOx	PM10	CO	Nox	ROG	Sox	PM	
72	Rucksack March	1	54		4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	65.45	5.48	3.92	0.07	0.33
73	Monster Mash	1	6		4WD Pickups	3		2			0.20	0.02	0.01	0.00	0.00	7.27	0.61	0.44	0.01	0.04
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																				
74	Conduct Environmental Health Site Assessment	3	3		4WD Pickups	4		2			0.20	0.02	0.01	0.00	0.00	14.54	1.22	0.87	0.02	0.07
		3	3		5-ton truck	1		2			0.25	0.30	0.02	0.00	0.01	4.41	5.36	0.38	0.01	0.26
		3	3		3/4-ton trailer	1		2			0.25	0.30	0.02	0.00	0.01	4.41	5.36	0.38	0.01	0.26
		3	3		small trailers	3		2			0.20	0.02	0.01	0.00	0.00	10.91	0.91	0.65	0.01	0.06
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																				
75	Conventional Ordnance/Improvised Explosive Device Response	1	120		4WD Pickups	2		2			0.20	0.02	0.01	0.00	0.00	96.96	8.11	5.81	0.11	0.49
76	Land Mine Detection/Neutralization	1	45		4WD Pickups / Vans	2		2			0.20	0.02	0.01	0.00	0.00	36.36	3.04	2.18	0.04	0.18
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																				
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53		4WD Pickups	140		2			0.20	0.02	0.01	0.00	0.00	28.28	2.37	1.69	0.03	0.14
		14	53		Generators	176	74%	2	22.0		0.01	0.01	0.00	0.00	0.00	1.05	1.59	0.56	0.35	0.23
		14	53		Forklift	8	48%	8	37.0		0.01	0.01	0.00	0.00	0.00	0.05	0.07	0.03	0.02	0.01
<b>6.3.3 Combat Terrorism</b>																				
78	Small Boat Attack	1	36		None															
											lbs/year	54230.04	89062.56	12407.03	5275.14	7541.34				
											tons/year	27.12	44.53	6.20	2.64	3.77				

Assumptions: Fuel truck is equivalent to 4WD vehicle; large trucks modeled as MDTs. Busses assumed to be diesel powered  
 Emission factors from ARB's OFFROAD 2007 Model  
 Generator Emissions from Table C-12  
 (a) Days = the number of days per operation  
 (b) Operations = the number of operations per year  
 Heater is assumed to be "other industrial equipment" from URBEMIS Model.





							lbs/item	lbs/item	lbs/item	lbs/item	lbs/item	Total CO	Total NOx	Total ROG	Total SOx	Total PM10		
<b>1.5.7 Conduct Naval Special Warfare</b>																		
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	86	Smokes/Flares/Surface Explosive	3 flares, 10 grenades	Grenades M116A1 860 Green Par: M195 258 Small Arms 6600/5000 .5 cal/7.62 mm	3.70E-04 9.40E-03 1.80E-03 6.80E-04	5.60E-03 2.40E-03 2.80E-05 4.40E-05	4.20E-05 7.80E-05 3.50E-07	4.70E-04 1.20E-01 7.80E-05 3.50E-07	1.20E-01 1.20E-01 9.80E-05 1.70E-05	3.18E-01 2.43E+00 1.19E+01 3.40E+00	4.82E+00 6.19E-01 1.85E-01 2.20E-01	3.61E-02 0.00E+00 0.00E+00 0.00E+00	4.04E-01 2.01E-02 0.00E+00 1.75E-03	1.03E+02 3.10E+01 6.47E-01 8.50E-02		
29	Over-the-Beach Stalk	1	24	None														
30	Immediate Action Drills	1	12	Smokes/Flares/Surface	10	Grenades M116A1 120 Green Par: M195 36 Small Arms 5000	3.70E-04 9.40E-03 1.80E-03	5.60E-03 2.40E-03 2.80E-05	4.20E-05 7.80E-05	4.70E-04 1.20E-01 7.80E-05	1.20E-01 1.20E-01 9.80E-05	4.44E-02 3.38E-01 5.40E+01	6.72E-01 8.64E-02 8.40E-01	5.04E-03 0.00E+00 0.00E+00	5.64E-02 2.81E-03 0.00E+00	1.44E+01 4.32E+00 2.94E+00		
31	Breacher Training	1	6	Small Arms	1400	12 gauge	1.50E-03	4.20E-05			7.40E-05	2.10E+00	5.88E-02	0.00E+00	0.00E+00	1.04E-01		
32	Amphibious Warfare Exercise	1	84	Smoke Grenades/Flares	3													
33	Mobility Primary Mission Area	1	200	Smoke/Flares	3	Smoke	1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	7.20E+00	1.02E-02	1.26E+00	9.60E-02	7.80E+01		
34	Escape and Evasion	1	84	Smoke/Flares	3	Smoke	1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	3.02E+00	4.28E-03	5.29E-01	4.03E-02	3.28E+01		
N9	Underwater Demolition Qualification / Certification	1	12	12.5-13.75 pound (underwater)	two sequential 12.5-13.75 pound	Underwater												
		1	12	25.5-pound (underwater)	two sequential 12.5-13.75 pound charges or a single 25.5-pound charge	Underwater												
N10	Vehicle Patrolling and Testing	1	50	None	0													
N11	NSW Demolition Training: Demolition Requalifications and Training	1	12	Blast Caps/Diver Recall	5 -10 pounds of C-4	Underwater Underwater												
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																		
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	Smoke Grenades/Flares	3	Smoke	1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.30E-01	5.54E+00	7.85E-03	9.70E-01	7.39E-02	6.01E+01		
36	Rappel and Fast Rope Training	1	11	None	0													
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (AS)	14	40	≤ 10 lbs C-4 (underwater)	1	Underwater												
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																		
38	OPDS	25	6	None	0													
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	None	0													
40	Barge Ferry/Causeway Coxswain Training	3	54	None	0													
41	Causeway Pier Insertion and Retraction	5	10	None	0													
42	Elevated Causeway System (ELCAS)	10	4	None	0													
43	Establish Beach Party Command Post	4	16	5.56 caliber rounds	30	5.56 Blank 30	2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.40E-03	6.00E-04	0.00E+00	2.94E-01	2.07E-04		
				7.62 caliber blanks	100	7.62 caliber blanks 100 (b)	6.80E-04	4.40E-05		3.50E-07	1.70E-05	6.80E-02	4.40E-03	0.00E+00	3.50E-05	1.70E-03		
44	Sterngate Marriage to Amphibious Ship/LCU	1	40	None	0													
45	LCU/LCM Beaching	1	60	None	0													
46	LCU/LCM Towing/Being Towed	1	60	None	0													
47	Communications Training	2	2	0	0													
48	Field Training Exercise with a Beach Camp	14	2	5.56 caliber rounds	30	5.56 Blank 30 (c)	2.80E-04	2.00E-05		9.80E-03	6.90E-06	8.40E-03	6.00E-04	0.00E+00	2.94E-01	2.07E-04		
				7.62 caliber blanks	100	7.62 caliber blanks 100 (c)	6.80E-04	4.40E-05		3.50E-07	1.70E-05	6.80E-02	4.40E-03	0.00E+00	3.50E-05	1.70E-03		
49	Maritime Pre-positioning Ships (MPS) Offload	5	2	None	0													
50	Reverse Osmosis Water Purification Unit	4	4	None	0													
51	Roll-on/Roll-off Discharge Facility	5	2	None	0													
52	MPF Utility Boat Operator Course	9	2	None	0													
53	LARC V Operator Training	6	1	None	0													
<b>4.9.1 Conduct Mission Area Training</b>																		
<b>NSW Diving and Beach Operations</b>																		
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving	1	126	Diver Recall	1	Underwater												
55	Open Circuit Breathing Diving	1	12	Diver Recall	1	Underwater												
56	OTB Field Training Exercise	5	36	Small arm	15000 7.62mm; 19800 .5cal ANN	7.62 mm 15000 0.5 cal 19800	6.80E-04 1.80E-03	4.40E-05 2.80E-05		3.50E-07 9.80E-05	1.70E-05 9.80E-05	1.02E+01 3.56E+01	6.60E-01 5.54E-01	0.00E+00 0.00E+00	5.25E-03 0.00E+00	2.55E-01 1.94E+00		
57	Rock Portage	1	20	Smoke Grenades/Flares	3	Smoke 60 Grenades M116A1 60	1.20E-02 3.70E-04	1.70E-05 5.60E-03	2.10E-03 4.20E-05	1.60E-04 4.70E-04	1.30E-01 1.20E-01	7.20E-01 2.22E-02	1.02E-03 3.36E-01	1.26E-01 2.52E-03	9.60E-03 2.82E-02	7.80E+00 7.20E+00		
<b>NSW Land Warfare</b>																		
58	Land Patrolling	1	18	None	0													
59	Immediate Action Drills	1	6	.5CAL/7.62 BLANK	5000 RNDs each per operation (3	0.5 cal 30000 7.62 caliber blanks 30000	1.80E-03 6.80E-04	2.80E-05 4.40E-05			9.80E-05 1.70E-05	5.40E+01 2.04E+01	8.40E-01 1.32E+00	0.00E+00 0.00E+00	0.00E+00 1.05E-02	2.94E+00 5.10E-01		
<b>NSW Advanced Training</b>																		
60	Over the Beach Insertion / Photo Reconnaissance	1	31	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks p	9 mm blank 310 5.56 mm blank 310	3.10E-04 2.80E-04	1.50E-05 2.00E-05		9.80E-03 6.90E-06	2.40E-05 6.90E-06	9.61E-02 8.68E-02	4.65E-03 6.20E-03	0.00E+00 0.00E+00	0.00E+00 3.04E+00	7.44E-03 2.14E-03		
61	Photo Image Capture	14	4	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks p	9 mm blank 40 5.56 mm blank 40	3.10E-04 2.80E-04	1.50E-05 2.00E-05		9.80E-03 6.90E-06	2.40E-05 6.90E-06	1.24E-02 1.12E-02	6.00E-04 8.00E-04	0.00E+00 0.00E+00	0.00E+00 3.92E-01	9.60E-04 2.76E-04		
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	24	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks p	9 mm blank 240 5.56 mm blank 240	3.10E-04 2.80E-04	1.50E-05 2.00E-05		9.80E-03 6.90E-06	2.40E-05 6.90E-06	7.44E-02 6.72E-02	3.60E-03 4.80E-03	0.00E+00 0.00E+00	0.00E+00 2.35E+00	5.76E-03 1.66E-03		
63	Stalking, Movement and Hide-Sites	5	8	None	0													
64	CQC/CQD	1	198	Small Arms	104600 9 MM simunition; 36300 5.56 simunition;	9 MM 7200 5.56 Blank 10000	3.10E-04 2.80E-04	1.50E-05 2.00E-05			2.40E-05 6.90E-06	2.23E+00 2.80E+00	1.08E-01 2.00E-01	0.00E+00 0.00E+00	0.00E+00 9.80E+01	1.73E-01 6.90E-02		

						lbs/item	lbs/item	lbs/item	lbs/item	lbs/item	Total CO	Total NOx	Total ROG	Total SOx	Total PM10					
65	Communications	5	6	Small Arms	7300 .38 cal	.38 cal		7300			1.00E-04	6.80E-05	6.30E-07	1.80E-05	7.30E-01	4.96E-01	0.00E+00	4.60E-03	1.31E-01	
66	Unmanned Aerial Vehicle (UAV) Training	5	12	Grenades (flash crash)	3	Grenades	M116A1	594			3.70E-04	5.60E-03	4.20E-05	4.70E-04	2.20E-01	3.33E+00	2.49E-02	2.79E-01	7.13E+01	
67	Around the World Training	1	6	None	0															
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and I NSW Physical Fitness Training</b>																				
68	Physical Training Runs	1	464	None	0															
69	Physical Conditioning Training Exercise	1	280	None	0															
70	Swim Training	1		None	0															
71	Hell Week	5	6	Smokes	128 per year	Smoke		128			1.20E-02	1.70E-05	2.10E-03	1.60E-04	1.54E+00	2.18E-03	2.69E-01	2.05E-02	1.66E+01	
				Grenade Simulators	200 per year	Grenades	M116A1	200			3.70E-04	5.60E-03	4.20E-05	4.70E-04	7.40E-02	1.12E+00	8.40E-03	9.40E-02	2.40E+01	
				White Para Flares	12 per year	Flares	M127A1	12			4.40E-03	5.70E-03	8.50E-05	1.30E-04	1.70E-01					
				7.62 Blank (A111)	27000 per year	7.62 mm		27000			6.80E-04	4.40E-05		3.50E-07	1.84E+01	1.19E+00	0.00E+00	9.45E-03	4.59E-01	
				50 CAL Blank	2000 per year	0.5 cal		2000			1.80E-03	2.80E-05		9.80E-05	3.60E+00	5.60E-02	0.00E+00	0.00E+00	1.96E-01	
72	Rucksack March	1	54	None	0															
73	Monster Mash	1	6	None	0															
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																				
74	Conduct Environmental Health Site Assessment	3	3	None	0															
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																				
75	Conventional Ordnance/Improvised Explosive Device Response	1	120	0																
76	Land Mine Detection/Neutralization	1	45	0																
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																				
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	0.50 cal blanks	15650 per year			15650			1.10E-02	1.20E-03		3.10E-04	1.72E+02	1.88E+01	0.00E+00	0.00E+00	4.85E+00	
				Grenades/flares	66 per year	Grenades	M116A1	66			3.70E-04	5.60E-03	4.20E-05	4.70E-04	2.44E-02	3.70E-01	2.77E-03	3.10E-02	7.92E+00	
				M16 Rounds	8250 per year			8250			7.80E-03	9.80E-05								
				M60 Rounds	8250 per year			8250			7.80E-03	9.80E-05								
				9mm Rounds	6600 per year			6600			3.10E-04	1.50E-05		8.20E-08	2.05E+00	9.90E-02	0.00E+00	5.41E-04	1.58E-01	
<b>6.3.3 Combat Terrorism</b>																				
78	Small Boat Attack	1	36	.50 cal rounds	350 per exercise			12600			1.80E-03	2.80E-05		9.80E-05	2.27E+01	3.53E-01	0.00E+00	0.00E+00	1.23E+00	

lbs/year 466.4772 43.336704 4.82412 115.25298 705.40229  
tons/year 0.2332386 0.0216684 0.0024121 0.0576265 0.3527011

Ordnance and explosives emission factors from AP-42



Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Aircraft Fuel Use per hour	Total Fuel Use	Emissions Factors (lb/gallon fuel) (c)			Emissions Factors (lb/operation) (c)			Emissions (lbs)			
										CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O	
<b>1.1.2 Conduct Maneuver - Move Forces</b>																			
1	Anchoring		1	72	None	0													
2	Towing		1	30	None	0													
3	Moor to Buoy		1	36	None	0													
<b>1.3.1 Perform Mine Countermeasures</b>																			
4	Parachute Operations		1	228	SH60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	813029.3257	22.938131	26.336373	
5	MCM Operations		1	58	None	0													
6	Floating Mine Operations		1	53	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	755974.6361	21.328438	24.488207	
7	Dive Platoon		1	8	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	114109.379	3.2193869	3.6963331	
8	Very Shallow Water (VSW) Operator Course		8	6	None	0													
9	VSW Mine Countermeasure Operations		1	156	None	0													
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations		1	156	None	0													
11	MK8 Marine Mammal/MMS Operations		1	208	None	0													
12	Mine Neutralization		1	4	SH-60 - 2 Hours	1	2.0	1200.0	2400.0	21.10	0.00	0.00	7131.84	0.20	0.23	57054.68952	1.6096934	1.8481665	
N1	Shock Wave Generator		1	90	None	0													
N2	Surf Zone Test Detachment/Equipment T&E		1	200	None	0													
N3	UUV Neutralization		1	4	None	0													
N4	Mine Hunting		1	200	SH-60 - 1.5 Hours cruise, 1 Hover	1	1.5	1200.0	1800.0	21.10	0.00	0.00	5348.88	0.15	0.17	1604663.143	45.272628	51.979684	
N5	Airborne Laser Mine Detection		1	48	SH-60 - 1.5 Hours cruise, 1 Hover	1	1.5	1200.0	1800.0	21.10	0.00	0.00	5348.88	0.15	0.17	385119.1543	10.865431	12.475124	
N6	Organic Airborne Surface Influence Sweep		1	100	SH-60 - 1.5 Hours cruise, 1 Hover	1	1.5	1200.0	1800.0	21.10	0.00	0.00	5348.88	0.15	0.17	802331.5714	22.636314	25.989842	
N7	Airborne Mine Neutralization		1	48	SH-60 - 1.5 Hours cruise, 1 Hover	1	1.5	1200.0	1800.0	21.10	0.00	0.00	5348.88	0.15	0.17	385119.1543	10.865431	12.475124	
13	Visit, Board, Search and Seizure		1	42	None	0													
<b>1.4.6 Conduct Maritime Interception</b>																			
<b>1.5.4 Conduct Amphibious Operations</b>																			
14	Small Boat Handling		1	94	None	0													
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None	0													
16	Basic Reconnaissance Course Final Mission		1	8	SH60	1	4.0	1200.0	4800.0	21.10	0.00	0.00	14263.67	0.40	0.46	456437.5162	12.877547	14.785332	
17	Obstacle Course		1	142	None	0													
18	Hydrographic Reconnaissance		1	44	None	0													
19	Surf Observations (SUROBS)		1	116	None	0													
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function		1	72	None	0													
21	CRRC Towing and High Speed Maneuver		1	8	None	0													
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean		1	24	None	0													
23	CRRC Navigation, Bay and Ocean Runs		1	26	None	0													
24	Amphibious Raid Course Final Mission		1	24	None	0													
25	Amphibious Raid Operations		3	18	CH-53E	3	4.0	4464.0	17856.0	21.10	0.00	0.00	53060.86	1.50	1.72	34383438.09	970.06565	1113.7791	
					CH-46E	4	4.0	1120.0	4480.0	21.10	0.00	0.00	13312.76	0.38	0.43	11502225.41	324.5142	372.59037	
					CH-53E T&G	3	1.0	274.0	274.0	21.10	0.00	0.00	814.22	0.02	0.03	131903.3103	3.72141	4.27273	
					CH-46E T&G	4	1.0	97.0	97.0	21.10	0.00	0.00	288.25	0.01	0.01	62260.92994	1.756578	2.0168117	
					UH-1N	1	4.0	692.0	2768.0	21.10	0.00	0.00	8225.38	0.23	0.27	1776683.032	50.125854	57.551906	
26	Direct Action (DA) Operations		3	18	CH-46E	7	4.0	1120.0	4480.0	21.10	0.00	0.00	13312.76	0.38	0.43	20128894.46	567.89984	652.03315	
					UH-1N	1	4.0	692.0	2768.0	21.10	0.00	0.00	8225.38	0.23	0.27	1776683.032	50.125854	57.551906	
27	Craft Landing Zone (CLZ)		1	4	None	0													
N8	Tactical Recovery of Aircraft and Personnel		1	4	CH-46E / CH-53E	3	4.0	1120.0	4480.0	21.10	0.00	0.00	13312.76	0.38	0.43	639012.5226	18.028566	20.699465	
			1	4	AH-1W	1	4.0	786.4	3145.6	21.10	0.00	0.00	9347.46	0.26	0.30	149559.3595	4.2195431	4.8446605	
			1	4	UH-1N	1	4.0	692.0	2768.0	21.10	0.00	0.00	8225.38	0.23	0.27	131606.1505	3.7130262	4.2631041	
<b>1.5.7 Conduct Naval Special Warfare</b>																			
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	86	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	1226675.825	34.608409	39.735581	
29	Over-the-Beach Stalk		1	24	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	85582.03428	2.4145402	2.7722498	
30	Immediate Action Drills		1	12	SH-60 Helo	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	42791.01714	1.2072701	1.3861249	
31	Breacher Training		1	20	None	0													
32	Amphibious Warfare Exercise		1	84	None	0													
33	Mobility Primary Mission Area		1	200	None	0													
34	Escape and Evasion		1	84	None	0													
N9	Underwater Demolition Qualification / Certification		1	12	None	0													
N10	Vehicle Patrolling and Testing		1	50	None	0													
N11	NSW Demolition Training: Demolition Requalifications and Training (Underwater Detonations)		1	12	None	0													
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																			
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	154	SH60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	549151.3866	15.493299	17.788603	
			1	154	CH46	1	1.0	1120.0	1120.0	21.10	0.00	0.00	3328.19	0.09	0.11	512541.2942	14.460413	16.602696	
36	Rappel and Fast Rope Training		1	11	NONE	0													
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy		14	40	SH-60	1	1.0	1200.0	1200.0	21.10	0.00	0.00	3565.92	0.10	0.12	1996914.133	56.33927	64.685829	

Scenario	Type Training	Reference	Days (a)	Operations (b)	Aircraft	Number	Aircraft Time on Range (hrs)	Aircraft Fuel Use per hour	Total Fuel Use	Emissions Factors (lb/gallon fuel) (c)			Emissions Factors (lb/operation) (c)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																		
38	OPDS		25	6	None	0												
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	5	None	0												
40	Barge Ferry/Causeway Coxswain Training		3	54	None	0												
41	Causeway Pier Insertion and Retraction		5	10	None	0												
42	Elevated Causeway System (ELCAS)		10	4	None	0												
43	Establish Beach Party Command Post		4	16	None	0												
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0												
45	LCU/LCM Beaching		1	60	None	0												
46	LCU/LCM Towing/Being Towed		1	60	None	0												
47	Communications Training		2	2	None	0												
48	Field Training Exercise with a Beach Camp		14	2	None	0												
49	Maritime Pre-positioning Ships (MPS) Offload		5	2	None	0												
50	Reverse Osmosis Water Purification Unit		4	4	None	0												
51	Roll-on/Roll-off Discharge Facility		5	2	None	0												
52	MPF Utility Boat Operator Course		9	2	None	0												
53	LARC V Operator Training		6	1	None	0												
<b>4.9.1 Conduct Mission Area Training</b>																		
<b>NSW Diving and Beach Operations</b>																		
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving		1	126	None	0												
55	Open Circuit Breathing Diving		1	12	None	0												
56	OTB Field Training Exercise		5	36	None	0												
57	Rock Portage		1	20	None	0												
<b>NSW Land Warfare</b>																		
58	Land Patrolling		1	18	None	0												
59	Immediate Action Drills		1	6	None	0												
<b>NSW Advanced Training</b>																		
60	Over the Beach Insertion / Photo Reconnaissance		1	31	None	0												
61	Photo Image Capture		14	4	None	0												
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	24	None	0												
63	Stalking, Movement and Hide-Sites		5	8	None	0												
64	CQC/CQD		1	198	SH-60	1	3.0	1200.0	3600.0	21.10	0.00	0.00	10697.75	0.30	0.35	6354466.045	179.27961	205.83955
65	Communications		5	6	None	0												
66	Unmanned Aerial Vehicle (UAV) Training		5	12	UAV	2												
67	Around the World Training		1	6	None	0												
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals</b>																		
<b>NSW Physical Fitness Training</b>																		
68	Physical Training Runs		1	464	None	0												
69	Physical Conditioning Training Exercise		1	280	None	0												
70	Swim Training		1	172	None	0												
71	Hell Week		5	6	None	0												
72	Rucksack March		1	54	None	0												
73	Monster Mash		1	6	None	0												
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																		
74	Conduct Environmental Health Site Assessment		3	3	None	0												
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																		
75	Conventional Ordnance/Improvised Explosive Device Response		1	120	None	0												
76	Land Mine Detection/Neutralization		1	45	None	0												
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																		
77	Field Training Exercise (FTX) e.g. SEAHAWK		14	53	None	0												
<b>6.3.3 Combat Terrorism</b>																		
78	Small Boat Attack		1	36	None	0												

87177252.5 2459.546309 2823.92354

Assumptions: Assume that SH-60 and CH-46 operation for Cast and Recovery are Special Personnel Insertion and Extraction Rig operations.  
 Assume 4 hours of cruise time for Amphibious Raid Operations, and one touch and go operation  
 SH60 from AESO Memorandum Report No. 9929, February 1999  
 CH53 from AESO Memorandum Report No. 9822 Rev C, February 2000  
 CH46 from AESO Memorandum Report No. 9816 Rev F, January 2001  
 UH1N from AESO Memorandum Report No. 9904 Rev A, May 1999  
 AH-1W from AESO Memorandum Report No. 9824 Rev A, April 1999  
 Assume Aircraft participate for one day during Amphibious Raid Operations and Direct Action Operations  
 Assume 1 LTO and 3 hours of cruise for CQC/CQD SH-60 operation.  
 (a) Days = the number of days per operation  
 (b) Operations = the number of operations per year

Emissions, short tons/year                      43588.63                      1.23                      1.41  
 Emissions, metric tons/year                      39543.34                      1.12                      1.28

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)		Engines and Generators		Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hr) (c)			Emissions, (lbs/year)			
						Hours	Propulsion	No.	Generator										No.	CO2	CH4	N2O	CO2	CH4	N2O
<b>1.1.2 Conduct Maneuver - Move Forces</b>																									
1	Anchoring	1	72	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	308365.6711	22.48183	7.899022
		1	72	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	38539135.74	2809.75	987.2094
2	Towing	1	30	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	611965.4431	44.6162	15.67596
		1	30	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	16057973.23	1170.729	411.3372
3	Moor to Buoy	1	36	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	154182.8355	11.24092	3.949511
		1	36	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	19269567.87	1404.875	493.6047
<b>1.3.1 Perform Mine Countermeasures</b>																									
4	Parachute Operations	1	228	RHIBs	3	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	2929473.875	213.5774	75.04071
5	MCM Operations	1	58	Zodiacs	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	14534.37486	1.059649	0.372309
6	Floating Mine Operations	1	53	RHIBs	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	453982.7935	33.09825	11.62912
7	Dive Platoon	1	8	RHIB	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	68525.70468	4.995963	1.755338
8	Very Shallow Water (VSW) Operator Course	8	6	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	205577.114	14.98789	5.266015
9	VSW Mine Countermeasure Operations	1	156	RHIBs / Water-Jet Driven Craft	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1002188.431	73.06595	25.67182
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatic	1	156	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	668125.6206	48.71064	17.11455
		1	156	Submersible	2	2																			
11	MK8 Marine Mammal/MMS Operations	1	208	RHIBs / Water-Jet Driven Craft	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1781668.322	129.895	45.63879
12	Mine Neutralization	1	4	RHIBs / Water-Jet Driven Craft	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	17131.42617	1.248991	0.438835
N1	Shock Wave Generator	1	90	CRRC	1	4	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	22553.3403	1.644283	0.577721
		1	90	LCM-8	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@7kW ea	940	100%	700.958	220	48	1070.714	0.1	0.0	385457.0888	28.10229	9.873778
N2	Surf Zone Test Detachment/Equipment T&E	1	200	RHIB / Water-Jet Driven Craft / CRRC	2	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1713142.617	124.8991	43.88346
N3	UUV Neutralization	1	4	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	17131.42617	1.248991	0.438835
N4	Mine Hunting	2	6	Acoustic Explorer (mine seeding & maint	1	12	GM-16-V-92N Diesel	2	GM Detroit Diesel 6-71, 75 kW	2	3	30% 550 rpm	2	49 kW	940	100%	700.958	220	48	1070.714	0.1	0.0	154182.8355	11.24092	3.949511
N5	Airborne Laser Mine Detection	1	48	None																					
N6	Organic Airborne Surface Influence Sweep	1	100	None																					
N7	Airborne Mine Neutralization	1	48	RHIB	1	12	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	616731.3421	44.96366	15.79804
<b>1.4.6 Conduct Maritime Interception</b>																									
13	Visit, Board, Search and Seizure	1	42	Foss Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	856751.6203	62.46268	21.94635
		1	42	RHIB	1	4	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	179879.9748	13.1144	4.607763
		1	42	Ship (DDG or CG)	1	4	GE LM 2500	4	Allison 501-K34, 2,000 kW ea	3	4-6	2.5%	2	2@1300kW ea	104960	35%	78268.67	246	5980	133816.4	9.8	3.4	22481162.52	1639.021	575.8721
<b>1.5.4 Conduct Amphibious Operations</b>																									
14	Small Boat Handling	1	94	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	141334.2659	10.30417	3.620385
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	Personal Watercraft / CRRC / RHIB	1	1	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	34445.10155	2.511268	0.882338
16	Basic Reconnaissance Course Final Mission	1	8	IBS	1	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	3007.11204	0.219238	0.077029
		1	8	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@7kW ea	460	100%	343.022	220	23	523.9665	0.0	0.0	25150.39161	1.833625	0.644246
17	Obstacle Course	1	142	None																					
18	Hydrographic Reconnaissance	1	44	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	48113.79265	3.507804	1.232472
		1	44	Small Water Craft	8	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	132312.9298	9.64646	3.389297
		1	44	RHIB / CRRC	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	282668.5318	20.60835	7.24077
		1	44	rigid, 10-meter craft	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	282668.5318	20.60835	7.24077
19	Surf Observations (SUROBS)	1	116	None																					
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Orga	1	72	CRRC/Zodiac/Propeller Surface Craft/Rt	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	162384.0502	11.83884	4.159591

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hr) (c)			Emissions, (lbs/year)			
							Hours	Propulsion		Generator										CO2	CH4	N2O	CO2	CH4	N2O	
								No.	No.	No.																No.
21	CRRC Towing and High Speed Maneuver	1	72	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	78731.66069	5.740042	2.016772	
		1	8	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	12028.44816	0.876951	0.308118	
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay 1	1	8	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	8747.962299	0.637782	0.224086	
		1	24	CRRC	4	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	36085.34448	2.630853	0.924354	
		1	24	Personal Watercraft	1	6	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	26243.8869	1.913347	0.672257	
23	CRRC Navigation, Bay and Ocean Runs	1	24	RHIB	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	154182.8355	11.24092	3.949511	
		1	24	LCU	1	6	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	460	100%	343.022	220	23	523.9665	0.0	0.0	75451.17483	5.500874	1.932739	
		1	26	CRRC	6	6	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	58638.68479	4.275136	1.502075	
24	Amphibious Raid Course Final Mission	1	26	RHIB	1	6	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	167031.4052	12.17766	4.278637	
		1	24	LCU	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	100601.5664	7.334498	2.576986	
25	Amphibious Raid Operations	1	24	CRRCs	12	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	36085.34448	2.630853	0.924354	
		3	18	CRRCs	13	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	87958.02718	6.412703	2.253112	
		3	18	LPD	1	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	550768.8987	40.15458	14.10837	
26	Direct Action (DA) Operations	3	18	LCUs	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	226353.5245	16.50262	5.798218	
		3	18	LCACs	2	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	11820	35%	8814.174	246	673	15069.65	1.1	0.4	3255044.192	237.3136	83.38044	
		3	18	EFV	6	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	60894.01882	4.439564	1.559847	
27	Craft Landing Zone (CLZ)	3	18	CRRCs	9	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	60894.01882	4.439564	1.559847	
		3	18	LPD	1	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	550768.8987	40.15458	14.10837	
N8	Tactical Recovery of Aircraft and Personnel	1	4	1 LCAC per CLZ	1	2	Avco Lycoming TF-40B 3,955 hp each	4	APU T-62-T-40-7 Sunstrand 60 kW each	2	35	80%	4	2@ 10kW ea	7910	35%	5898.487	246	451	10084.68	0.7	0.3	80677.44424	5.881902	2.066614	
		1	4	None																						
<b>1.5.7 Conduct Naval Special Warfare</b>																										
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	86	RHIBs / CRRCs	3	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	2209953.976	161.1198	56.60966	
		4	86	Rigid, 10-meter craft	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	736651.3253	53.7066	18.86989	
29	Over-the-Beach Stalk	1	24	CRRCs	1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	3007.11204	0.219238	0.077029	
		1	24	Boston Whaler	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	8747.962299	0.637782	0.224086	
30	Immediate Action Drills	1	12	RHIBs	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	25697.13925	1.873486	0.658252	
		1	12	CRRCs	1	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	1503.55602	0.109619	0.038515	
31	Breacher Training	1	20	None	0																					
		1	84	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	359759.9496	26.2288	9.215526	
32	Amphibious Warfare Exercise	1	84	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	4570	100%	3407.849	220	233	5205.493	0.4	0.1	1749045.712	127.5166	44.80314	
		1	200	RHIB or MK V	4	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1713142.617	124.8991	43.88346	
33	Mobility Primary Mission Area	1	84	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	359759.9496	26.2288	9.215526	
		1	84	MK V	2	2	MTU 12V 396 TE94, 12 cyl	2	Northern Light, M844, 4 cyl 16 kW	1	5-6	30%	1	10 kW	4570	100%	3407.849	220	233	5205.493	0.4	0.1	1749045.712	127.5166	44.80314	
N9	Underwater Demolition Qualification / Certification	1	12	RHIBs or CRRC	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	51394.27851	3.746972	1.316504	
		1	50	None																						
N10	Vehicle Patrolling and Testing	1	50	None																						
		1	12	CRRCs	4	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	6014.224081	0.438475	0.154059	
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>																										
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	RHIBs	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	329779.9538	24.04307	8.447565	
		1	154	CRRCs	2	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	38591.27119	2.813551	0.988545	
36	Rappel and Fast Rope Training	1	11	None																						

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)		Engines and Generators		Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hr) (c)			Emissions, (lbs/year)			
						Hours	Propulsion	No.	Generator										No.	CO2	CH4	N2O	CO2	CH4	N2O
37 SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASD)	14	40	RHIBs	2	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	2398399.664	174.8587	61.43684	
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>																									
38 OPDS	25	6	OUBs	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	2515039.161	183.3625	64.42465	
39 Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	Warping Tug	1	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	1019942.405	74.36033	26.1266	
	10	5	Barge Ferry	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	2039884.81	148.7207	52.25321	
40 Barge Ferry/Causeway Coxswain Training	3	54	Barge Ferry	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	6609226.785	481.855	169.3004	
41 Causeway Pier Insertion and Retraction	5	10	WTs	4	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	4079769.62	297.4413	104.5064	
42 Elevated Causeway System (ELCAS)	10	4	WTs	2	4	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	1631907.848	118.9765	41.80257	
	10	4	Personal Watercraft	2	4	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	58319.74866	4.251883	1.493905	
	10	4	LCM	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	335338.5548	24.44833	8.589953	
43 Establish Beach Party Command Post	4	16	None																						
44 Sterngate Marriage to Amphibious Ship/LCU	1	40	LCU	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	670677.1096	48.89666	17.17991	
45 LCU/LCM Beaching	1	60	LCU	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	503007.8322	36.67249	12.88493	
	1	60	LCM-8	1	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	503007.8322	36.67249	12.88493	
46 LCU/LCM Towing/Being Towed	1	60	LCU	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	1006015.664	73.34498	25.76986	
	1	60	LCM-8	2	4	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	1840	100%	1372.088	220	94	2095.866	0.2	0.1	1006015.664	73.34498	25.76986	
47 Communications Training	2	2	None																						
48 Field Training Exercise with a Beach Camp	14	2	None																						
49 Maritime Pre-positioning Ships (MPS) Offload	5	2	LCM-8	2	2	GM Detroit, V12-71N 460bhp	2	3-71 GM Detroit, 40 kW	2	10	2000 rpm (97%)	2	2@ 7kW ea	920	100%	686.044	220	47	1047.933	0.1	0.0	41917.31935	3.056041	1.073744	
	5	2	WTs	2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	203988.481	14.87207	5.225321	
	5	2	Barge Ferry	2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	203988.481	14.87207	5.225321	
50 Reverse Osmosis Water Purification Unit	4	4	None											4000											
51 Roll-on/Roll-off Discharge Facility	5	2	WTs	2	2	Foster Wheeler/Babcock & Wilcox	2	NA - No separate emissions	0	7	25%	2	NA	4000	35%	2982.8	246	228	5099.712	0.4	0.1	203988.481	14.87207	5.225321	
	5	2	Personal Watercraft	2	2	Yamaha Outboard, 160 hp (d)	1	None	0	2	100%	1	NA	160	100%	119.312	220	8	182.2492	0.0	0.0	7289.968583	0.531485	0.186738	
52 MPF Utility Boat Operator Course	9	2	MPF Utility Boat	2	4	Diesel Engines	2	None	0	2	660	2	NA	1320	100%	984.324	220	67	1503.556	0.1	0.0	216512.0669	15.78512	5.546122	
53 LARC V Operator Training	6	1	None																						
<b>4.9.1 Conduct Mission Area Training</b>																									
<b>NSW Diving and Beach Operations</b>																									
54 Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Divi	1	126	RHIBs	5	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	1349099.811	98.35802	34.55822	
55 Open Circuit Breathing Diving	1	12	RHIBs	5	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	128485.6963	9.36743	3.291259	
			LCU	1																					
56 OTB Field Training Exercise	5	36	CRRCs	5	2	assume paddling																			
57 Rock Portage	1	20	CRRCs	7	2	assume paddling																			
	1	20	IBS	9	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	22553.3403	1.644283	0.577721	
<b>NSW Land Warfare</b>																									
58 Land Patrolling	1	18	None																						
59 Immediate Action Drills	1	6	None																						
<b>NSW Advanced Training</b>																									
60 Over the Beach Insertion / Photo Reconnaissance	1	31	RHIB/CRRC	1	2	Caterpillar 3126 Diesels	2	None	0	1-2	600	2	NA	940	100%	700.958	220	48	1070.714	0.1	0.0	66384.27641	4.839839	1.700484	
	1	31	Kayak	1	2	assume paddling																			
61 Photo Image Capture	14	4	None																						
62 Field Skills (Observation Drill, Sketching, Range Estimation)	1	24	None																						
63 Stalking, Movement and Hide-Sites	5	8	None																						
64 CQC/CQD	1	198	CRRCs	5	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	124043.3717	9.043556	3.177466	
65 Communications	5	6	None																						
66 Unmanned Aerial Vehicle (UAV) Training	5	12	None																						
67 Around the World Training	1	6	CRRCs	7	2	assume paddling																			
	1	6	Sea Kayaks	5	2	assume paddling																			

Scenario Type Training	Reference	Days (a)	Operations (b)	Ship/Boat Type	Number	Ship Time on Range (hrs) (e)	Engines and Generators				Ave. Speed (Knots)	Power Level (%) or horsepower	Engines on Line	Generator - Load (kW)	Ship hp	Ship Load Factor	kW	Fuel Use, g/kWh	Fuel Use, gallons/hr	Emissions Factors (lb/hr) (c)			Emissions, (lbs/year)		
							Hours	Propulsion	No.	Generator										No.	CO2	CH4	N2O	CO2	CH4
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and 0 NSW Physical Fitness Training</b>																									
68	Physical Training Runs	1	464	None	3																				
69	Physical Conditioning Training Exercise	1	280	CRRCs / Propeller Surface Craft	3	2	assume paddling																		
70	Swim Training	1	172	RHIBs	5	2	assume paddling																		
71	Hell Week	5	6	CRRCs	5	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	18794.45025	1.370236	0.481434
72	Rucksack March	1	54	None																					
73	Monster Mash	1	6	CRRCs	3	2	OMC Outboard, 55 hp (d)	1	None	0	2	600-800	1	NA	55	100%	41.0135	220	3	62.64817	0.0	0.0	2255.33403	0.164428	0.057772
<b>4.12.6 Provide Industrial and Environmental Health Services</b>																									
74	Conduct Environmental Health Site Assessment	3	3	None																					
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>																									
75	Conventional Ordnance/Improvised Explosive Device Response	1	120	None																					
76	Land Mine Detection/Neutralization	1	45	None																					
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>																									
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53	Boston Whalers	144	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	14604723.06	1064.778	374.1111
<b>6.3.3 Combat Terrorism</b>																									
78	Small Boat Attack	1	36	Boston Whalers	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	4920.728793	0.358753	0.126048
		1	36	surface vessel dropping anchor and 3 sh	1	2																			
		1	36	18' Bayliner	1	2	OMC Johnson Outboards (d)	2	None	0	2-3	1000	2	NA	60	100%	44.742	220	3	68.34346	0.0	0.0	4920.728793	0.358753	0.126048

166110282.3 12110.503 4255.0417

Assume marine vessels participate for one day during Amphibious Raid Operations and Direct Action Operations and Seahawk Assumptions: Watercraft operates 8 hours per day for the days during which the operation occurs

Emissions, short tons/year 83055.14 6.06 2.13

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
<b>1.1.2 Conduct Maneuver - Move Forces</b>															
1	Anchoring	1	72	None											
2	Towing	1	30	None											
3	Moor to Buoy	1	36	None											
<b>1.3.1 Perform Mine Countermeasures</b>															
4	Parachute Operations	1	228	4WD Pickups	2		2			22.71	0.00	0.00	20714	1.72	1.46
5	MCM Operations	1	58	4WD Pickups	2		2			22.71	0.00	0.00	5269	0.44	0.37
6	Floating Mine Operations	1	53	4WD Pickups	1		2			22.71	0.00	0.00	2408	0.20	0.17
7	Dive Platoon	1	8	None											
8	Very Shallow Water (VSW) Operator Course	8	6	None											
9	VSW Mine Countermeasure Operations	1	156	None											
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operations	1	156	None											
11	MK8 Marine Mammal/MMS Operations	1	208	4WD Pickups	0		2			22.71	0.00	0.00	0	0.00	0.00
12	Mine Neutralization	1	4	4WD Pickups	2		2			22.71	0.00	0.00	363	0.03	0.03
N1	Shock Wave Generator	1	90	4WD Pickups	1		2			22.71	0.00	0.00	4088	0.34	0.29
N2	Surf Zone Test Detachment/Equipment T&E	1	200	4WD Pickups	1		2			22.71	0.00	0.00	9085	0.75	0.64
N3	UUV Neutralization	1	4	4WD Pickups	2		2			22.71	0.00	0.00	363	0.03	0.03
N4	Mine Hunting	1	200	None											
N5	Airborne Laser Mine Detection	1	48	None											
N6	Organic Airborne Surface Influence Sweep	1	100	None											
N7	Airborne Mine Neutralization	1	48	None											
<b>1.4.6 Conduct Maritime Interception</b>															
13	Visit, Board, Search and Seizure	1	42	None											
<b>1.5.4 Conduct Amphibious Operations</b>															
14	Small Boat Handling	1	94	HMMWV	1	65%	3	150		1.25	0.00	0.00	34448	3.82	0.00
15	Swimmer Conditioning - Bay and Ocean with fins	1	189	HMMWV	1	65%	3	150		1.25	0.00	0.00	69263	7.68	0.00
		1	189	Truck	1	80%	1			48.21	0.00	0.03	7289	0.20	4.28
16	Basic Reconnaissance Course Final Mission	1	8	None											
17	Obstacle Course	1	142	4WD Pickups	2		2			22.71	0.00	0.00	12901	1.07	0.91
18	Hydrographic Reconnaissance	1	44	4WD Pickups	3		2			22.71	0.00	0.00	5996	0.50	0.42
19	Surf Observations (SUROBS)	1	116	4WD Pickups	2		2			22.71	0.00	0.00	10539	0.87	0.74
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organization and Function	1	72	HMMWV/ 4WD Pickups	2	65%	3	150		1.25	0.00	0.00	52772	5.85	0.00
21	CRRC Towing and High Speed Maneuver	1	8	4WD Pickups / HMMWV	1		2			22.71	0.00	0.00	363	0.03	0.03
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay and Ocean	1	24	4WD Pickups / HMMWV	1		2			22.71	0.00	0.00	1090	0.09	0.08
23	CRRC Navigation, Bay and Ocean Runs	1	26	4WD Pickups / HMMWV	1		8			22.71	0.00	0.00	4724	0.39	0.33
24	Amphibious Raid Course Final Mission	1	24	None	0										
25	Amphibious Raid Operations	3	18	HMMWVs	6	65%	3	150		1.25	0.00	0.00	118737	13.16	0.00
		3	18	4WD Pickups	8		8			22.71	0.00	0.00	78496	6.51	5.55
		3	18	AAVs	6		2			180.277	0.0	0.0	116819	8.52	2.99
		3	18	LAVs	6	65%	2	150		1.25	0.00	0.00	79158	8.78	0.00
		3	18	IFAVs	6	65%	2	150		1.25	0.00	0.00	79158	8.78	0.00
26	Direct Action (DA) Operations	3	18	Light Wheeled Vehicles	16		2			22.71	0.00	0.00	39248	3.26	2.77
27	Craft Landing Zone (CLZ)	1	4	HMMWVs	1	65%	3	150		1.25	0.00	0.00	1466	0.16	0.00
N8	Tactical Recovery of Aircraft and Personnel	1	4	4WD Pickups	9		2			22.71	0.00	0.00	1635	0.14	0.12
<b>1.5.7 Conduct Naval Special Warfare</b>															
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach	4	86	4WD Pickups	3		2			22.71	0.00	0.00	46880	3.89	3.31
29	Over-the-Beach Stalk	1	24	4WD Pickups	1		2			22.71	0.00	0.00	1090	0.09	0.08
30	Immediate Action Drills	1	12	4WD Pickups	4		2			22.71	0.00	0.00	2180	0.18	0.15
31	Breacher Training	1	20	4WD Pickups	3		2			22.71	0.00	0.00	2726	0.23	0.19
32	Amphibious Warfare Exercise	1	84	None	0										
33	Mobility Primary Mission Area	1	200	None	0										
34	Escape and Evasion	1	84	None	0										
N9	Underwater Demolition Qualification / Certification	1	12	4WD Pickups	2		2			22.71	0.00	0.00	1090	0.09	0.08
N10	Vehicle Patrolling and Testing	1	50	HMMVs	6	65%	3	150		1.25	0.00	0.00	109941	12.19	0.00
N11	NSW Demolition Training: Demolition Requalifications and Training (Underwater Detonations)	1	12	4WD Pickups	1		2			22.71	0.00	0.00	545	0.05	0.04
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>															
35	Helicopter Rope Suspension Training/Cast & Recovery Operation	1	154	4WD Pickups	2		2			22.71	0.00	0.00	13991	1.16	0.99
36	Rappel and Fast Rope Training	1	11	4WD Pickups	4		2			22.71	0.00	0.00	1999	0.17	0.14
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (ASDS) Certification to Deploy	14	40	4WD Pickups	2		2			22.71	0.00	0.00	50877	4.22	3.60
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>															
38	OPDS	25	6	HMMWVs	1	65%	3	150		1.25	0.00	0.00	54971	6.09	0.00
		25	6	5-ton truck	1	80%	1			48.21	0.00	0.03	5785	0.15	3.40
		25	6	Dozer	2	59%	8	240.0		1.25	0.00	0.00	425783	47.20	0.00
		25	6	Comm Van	1		8			22.71	0.00	0.00	27256	2.26	1.93
		25	6	RTV forklift	1	48%	8	93.0		1.25	0.00	0.00	66416	7.36	0.00
		25	6	LARCV	2		2	350.0		10.85	2.338	0.879935	6510	1402.80	527.96
39	Amphibious Bulk Liquid Transfer System (ABLTS)	10	5	HMMWVs	1	65%	3	150		1.25	0.00	0.00	18324	2.03	0.00
		10	5	5-ton truck	1	80%	1			48.21	0.00	0.03	1928	0.05	1.13
		10	5	Van	1		8			22.71	0.00	0.00	9085	0.75	0.64
		10	5	Dozers	2	59%	8	240.0		1.25	0.00	0.00	141928	15.73	0.00
		10	5	Rough Terrain Forklift	1	48%	8	37.0		1.25	0.00	0.00	8901	0.99	0.00
		10	5	LARCV	2		2	350.0		10.85	2.338	0.879935	2170	467.60	175.99
40	Barge Ferry/Causeway Coxswain Training	3	54	HMMWVs	1	65%	3	150		1.25	0.00	0.00	59368	6.58	0.00
		3	54	5-ton truck	1	80%	1			48.21	0.00	0.03	6247	0.17	3.67
		3	54	Van	1		8			22.71	0.00	0.00	29436	2.44	2.08

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
41 Causeway Pier Insertion and Retraction		3	54	Dozer	2	59%	8	240.0	1.25	0.00	0.00	459846	50.98	0.00	
		3	54	LARCV	2		2	350.0	10.85	2.338	0.879935	7031	1515.02	570.20	
		5	10	HMMWVs	2	65%	3	150	1.25	0.00	0.00	36647	4.06	0.00	
		5	10	5-ton truck	1	80%	1		48.21	0.00	0.03	1928	0.05	1.13	
		5	10	Van	1		8		22.71	0.00	0.00	9085	0.75	0.64	
		5	10	Rough Terrain Forklift	1	48%	8	37.0	1.25	0.00	0.00	8901	0.99	0.00	
42 Elevated Causeway System (ELCAS)		5	10	Dozers	2	59%	8	240.0	1.25	0.00	0.00	141928	15.73	0.00	
		5	10	LARCV	2		2	350.0	10.85	2.338	0.879935	2170	467.60	175.99	
		10	4	HMMWVs	4	65%	3	150	1.25	0.00	0.00	58635	6.50	0.00	
		10	4	5-ton truck	3	80%	1		48.21	0.00	0.03	4628	0.12	2.72	
		10	4	Light Trucks	4	62%	8	161.0	1.25	0.00	0.00	160082	17.75	0.00	
		10	4	Dozers	2	59%	8	240.0	1.25	0.00	0.00	113542	12.59	0.00	
		10	4	Forklifts	1	48%	8	37.0	1.25	0.00	0.00	7120	0.79	0.00	
		10	4	75-Ton Crane	2	74%	8	194.0	1.25	0.00	0.00	115114	12.76	0.00	
		10	4	Pile Driver	2	30%	24	20.0	1.25	0.00	0.00	14433	1.60	0.00	
		10	4	ambulance	1		8		22.71	0.00	0.00	7268	0.60	0.51	
		10	4	water buffalo	1	80%	1		48.21	0.00	0.03	1543	0.04	0.91	
		10	4	140-ton crane	1	74%	8	399.0	1.25	0.00	0.00	118377	13.12	0.00	
		10	4	30-ton crane	2	74%	8	194.0	1.25	0.00	0.00	115114	12.76	0.00	
		10	4	LARCV	2		2	350.0	10.85	2.338	0.879935	1736	374.08	140.79	
43 Establish Beach Party Command Post		10	4	Air compressors	2	48%	8	106.0	1.25	0.00	0.00	40798	4.52	0.00	
		10	4	Pile Extractor	1	30%	24	20.0	1.25	0.00	0.00	7217	0.80	0.00	
		4	16	HMMWVs	3	65%	3	150	1.25	0.00	0.00	70363	7.80	0.00	
		4	16	5-ton truck	1	80%	1		48.21	0.00	0.03	2468	0.07	1.45	
		4	16	Dozer	1	59%	8	240.0	1.25	0.00	0.00	90834	10.07	0.00	
		4	16	Generators/various	2	30%	24	Various	2064.95	0.00	5.28	951529	0.00	2433.02	
		4	16	Heaters	2	51%	8	238.0	1.25	0.00	0.00	155726	17.26	0.00	
		4	16	LARCV	2		2	350.0	10.85	2.338	0.879935	2778	598.53	225.26	
44 Sterngate Marriage to Amphibious Ship/LCU		1	40	None	0										
45 LCU/LCM Beaching		1	60	HMMWVs	1	65%	3	150	1.25	0.00	0.00	21988	2.44	0.00	
		1	60	5-ton truck	1	80%	1		48.21	0.00	0.03	2314	0.06	1.36	
		1	60	Dozer	1	59%	8	240.0	1.25	0.00	0.00	85157	9.44	0.00	
46 LCU/LCM Towing/Being Towed		1	60	LARCV	1		2	350.0	10.85	2.338	0.879935	1302	280.56	105.59	
		1	60	Dozer	1	59%	8	240.0	1.25	0.00	0.00	85157	9.44	0.00	
47 Communications Training		2	2	4WD Pickups	4		2		22.71	0.00	0.00	727	0.06	0.05	
		2	2	RTVs	4	48%	8	93.0	1.25	0.00	0.00	7084	0.79	0.00	
		2	2	Bus	2		2		89.15	0.00	0.07	1426	0.03	1.13	
		2	2	Tractor with flat bed	1	80%	1		48.21	0.00	0.03	154	0.00	0.09	
	48 Field Training Exercise with a Beach Camp		14	2	HMMWVs	2	65%	3	150	1.25	0.00	0.00	20522	2.28	0.00
			14	2	5-ton truck	1	80%	1		48.21	0.00	0.03	1080	0.03	0.63
			14	2	Dozer	2	59%	8	240.0	1.25	0.00	0.00	79480	8.81	0.00
			14	2	4WD Pickups	10		2		22.71	0.00	0.00	12719	1.06	0.90
			14	2	Fuel Truck	1		2		22.71	0.00	0.00	1272	0.11	0.09
			14	2	20-ton Stake Trucks	1		2		1.25	0.00	0.00	0	0.00	0.00
			14	2	50-ton Low-bed Trucks	1		2		1.25	0.00	0.00	0	0.00	0.00
			14	2	Wheeled Loaders	2	47%	8	147.0	1.25	0.00	0.00	38367	4.25	0.00
		14	2	Generators/various	23	30%	24	Various	2064.95	0.00	5.28	416294	0.00	1064.45	
		14	2	Heaters	117	51%	8	238.0	1.25	0.00	0.00	3985614	441.83	0.00	
49 Maritime Pre-positioning Ships (MPS) Offload		14	2	Welder	6	45%	8	45.0	1.25	0.00	0.00	34099	3.78	0.00	
		5	2	LARCV	2		2	350.0	10.85	2.338	0.879935	1215	261.86	98.55	
		5	2	HMMWVs	2	65%	3	150	1.25	0.00	0.00	7329	0.81	0.00	
		5	2	5-ton truck	1	80%	1		48.21	0.00	0.03	386	0.01	0.23	
		5	2	Dozer	1	59%	8	240.0	1.25	0.00	0.00	14193	1.57	0.00	
		5	2	4WD Pickups	3		2		22.71	0.00	0.00	1363	0.11	0.10	
		5	2	LARCV	1		2	350.0	10.85	2.338	0.879935	217	46.76	17.60	
		4	4	4WD Pickups	2		2		22.71	0.00	0.00	1454	0.12	0.10	
50 Reverse Osmosis Water Purification Unit		4	4	RTVs	6	48%	8	93.0	1.25	0.00	0.00	42506	4.71	0.00	
		4	4	Generator	1	74%	8	22.0	1.25	0.00	0.00	2611	0.29	0.00	
		4	4	Flatbed Truck	1	80%	1		48.21	0.00	0.03	617	0.02	0.36	
	51 Roll-on/Roll-off Discharge Facility		5	2	HMMWVs/Jeeps	3	65%	3	150	1.25	0.00	0.00	10994	1.22	0.00
			5	2	6-ton truck	1	80%	1		48.21	0.00	0.03	386	0.01	0.23
			5	2	Dozer	1	59%	8	240.0	1.25	0.00	0.00	14193	1.57	0.00
			5	2	Cranes	2	43%	8	194.0	1.25	0.00	0.00	16723	1.85	0.00
		5	2	RTVs	2	48%	8	93.0	1.25	0.00	0.00	8855	0.98	0.00	
		5	2	LARCV	2		2	350.0	10.85	2.338	0.879935	434	93.52	35.20	
52 MPF Utility Boat Operator Course		9	2	Dozer	1	59%	8	240.0	1.25	0.00	0.00	25547	2.83	0.00	
		9	2	Van	1		2		22.71	0.00	0.00	818	0.07	0.06	
		9	2	LARCV	2		2	350.0	10.85	2.338	0.879935	781	168.34	63.36	
		9	2	LARCV	2		2	350.0	10.85	2.338	0.879935	260	56.11	21.12	
<b>4.9.1 Conduct Mission Area Training</b>															
<b>NSW Diving and Beach Operations</b>															
54 Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving		1	126	4WD Pickups	3		2		22.71	0.00	0.00	17171	1.43	1.21	
		1	126	Bus	2		2		89.15	0.00	0.07	44933	0.97	35.46	
55 Open Circuit Breathing Diving		1	12	4WD Pickups	3		2		22.71	0.00	0.00	1635	0.14	0.12	
		1	12	Bus	2		2		89.15	0.00	0.07	4279	0.09	3.38	
56 OTB Field Training Exercise		5	36	4WD Pickups	3		2		22.71	0.00	0.00	24530	2.04	1.73	
57 Rock Portage		1	20	4WD Pickups	1		2		22.71	0.00	0.00	909	0.08	0.06	
<b>NSW Land Warfare</b>															
58 Land Patrolling		1	18	4WD Pickups	2		2		22.71	0.00	0.00	1635	0.14	0.12	

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ground Vehicles	Number	Engine Load	Hours per day	Horsepower	Emissions Factors (lb/hr)			Emissions (lbs)		
										CO2	CH4	N2O	CO2	CH4	N2O
59	Immediate Action Drills <b>NSW Advanced Training</b>	1	6		4WD Pickups	2		2		22.71	0.00	0.00	545	0.05	0.04
60	Over the Beach Insertion / Photo Reconnaissance	1	31		4WD Pickup	2		2		22.71	0.00	0.00	2816	0.23	0.20
61	Photo Image Capture	14	4		4WD Pickups	2		2		22.71	0.00	0.00	5088	0.42	0.36
62	Field Skills (Observation Drill, Sketching, Range Estimation)	1	24		4WD Pickups	2		2		22.71	0.00	0.00	2180	0.18	0.15
63	Stalking, Movement and Hide-Sites	5	8		4WD Pickups	3		2		22.71	0.00	0.00	5451	0.45	0.39
64	CQC/CQD	1	198		4WD Pickups	5		2		22.71	0.00	0.00	44972	3.73	3.18
65	Communications	5	6		4WD Pickups	6		2		22.71	0.00	0.00	8177	0.68	0.58
66	Unmanned Aerial Vehicle (UAV) Training	5	12		4WD Pickups	1		2		22.71	0.00	0.00	2726	0.23	0.19
67	Around the World Training	1	6		4WD Pickups	4		2		22.71	0.00	0.00	1090	0.09	0.08
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and Individuals</b>															
<b>NSW Physical Fitness Training</b>															
68	Physical Training Runs	1	464		4WD Pickups	3		2		22.71	0.00	0.00	63233	5.25	4.47
69	Physical Conditioning Training Exercise	1	280		4WD Pickups	2		2		22.71	0.00	0.00	25439	2.11	1.80
70	Swim Training	1	172		4WD Pickups	1		2		22.71	0.00	0.00	7813	0.65	0.55
71	Hell Week	5	6		4WD Pickups	3		2		22.71	0.00	0.00	4088	0.34	0.29
72	Rucksack March	1	54		4WD Pickups	3		2		22.71	0.00	0.00	7359	0.61	0.52
73	Monster Mash	1	6		4WD Pickups	3		2		22.71	0.00	0.00	818	0.07	0.06
<b>4.12.6 Provide Industrial and Environmental Health Services</b>															
74	Conduct Environmental Health Site Assessment	3	3		4WD Pickups	4		2		22.71	0.00	0.00	1635	0.14	0.12
		3	3		5-ton truck	1		2		48.21	0.00	0.03	0	0.00	0.00
		3	3		3/4-ton trailer	1		2		48.21	0.00	0.03	0	0.00	0.00
		3	3		small trailers	3		2		22.71	0.00	0.00	1227	0.10	0.09
<b>6.1.1 Conduct Explosive Ordnance Disposal</b>															
75	Conventional Ordnance/Improvised Explosive Device Response	1	120		4WD Pickups	2		2		22.71	0.00	0.00	10902	0.90	0.77
76	Land Mine Detection/Neutralization	1	45		4WD Pickups / Vans	2		2		22.71	0.00	0.00	4088	0.34	0.29
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b>															
77	Field Training Exercise (FTX) e.g. SEAHAWK	14	53		4WD Pickups	140		2		22.71	0.00	0.00	4718853	391.63	333.45
		14	53		Generators	176	74%	2	22.0	1.25	0.00	0.00	5327398	590.58	0.00
		14	53		Forklift	8	48%	8	37.0	1.25	0.00	0.00	1056674	117.14	0.00
<b>6.3.3 Combat Terrorism</b>															
78	Small Boat Attack	1	36		None										
												<b>20901965</b>	<b>7733.26</b>	<b>6100.02</b>	

Assumptions: Fuel truck is equivalent to 4WD vehicle; large trucks modeled as MDTs. Busses assumed to be diesel powered  
 Emission factors from ARB's OFFROAD 2007 Model  
 Generator Emissions from Table C-12  
 (a) Days = the number of days per operation  
 (b) Operations = the number of operations per year  
 Heater is assumed to be "other industrial equipment" from URBEMIS Model.

Emissions, short tons/year                      **10451**                      **3.87**                      **3.05**  
 Emissions, metric tons/year                      **9481**                                      **4**                                      **3**



Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Type	Compound	Number or Amount	Weight of Compound, grams	Emissions, lbs/year	
											CO2 lbs/item	Total CO2
<b>Conduct Maneuver - Move Forces</b>												
1	Anchoring		1	72	None							
2	Towing		1	30	None							
3	Moor to Buoy		1	36	None							
<b>1.3.1 Perform Mine Countermeasures</b>												
4	Parachute Operations		1	228	Smoke Grenades/Flares	3	Smoke Gre	M18 Green	684		8.40E-02	5.75E+01
5	MCM Operations		1	58	Blast Caps/ Diver Recalls	1	Green Par:	M195	684		8.80E-02	6.02E+01
6	Floating Mine Operations		1	53	Blast Caps/ Diver Recalls	1	Underwater		53		0.790	4.19E+01
7	Dive Platoon		1	8	Blast Caps/Explosives	9 per training	Underwater					
			1	8	3.5 lb	8 sequential command detonated	Underwater					
8	Very Shallow Water (VSW) Operator Course		8	6	Diver Recalls	2 per training	Underwater					
9	VSW Mine Countermeasure Operations		1	156	Diver Recalls	2 per training	Underwater					
10	Autonomous Underwater Vehicle (AUV) Operations/UUV Operatio		1	156	Blast Caps/ Diver Recalls	2 per training	Underwater					
11	MK8 Marine Mammal/MMS Operations		1	208	13lbs [MK 87/88 C-4 in GRP	Approximately 10% of training inv	Underwater					
					29lb [MK86/89 PBXN in AL canis	Approximately 10% of training inv	Underwater					
12	Mine Neutralization		1	4	Blast Caps/ Diver Recalls	9 per training	Underwater		8		0.790	6.32E+00
			1	4	3.5lb explosive	8 sequential command detonated	Underwater					
N1	Shock Wave Generator		1	90	Underwater Explosives (15 gram	1 command detonation	Underwater					
					Diver Recalls	1 per training	Underwater					
N2	Surf Zone Test Detachment/Equipment T&E		1	200	None							
N3	UUV Neutralization		1	4	Explosives	2 sequential charges of either 3.3	Underwater					
			1	4	Seafox (3.3 lb PBXN9)	2 sequential charges of either 3.3	Underwater					
			1	4	Archerfish (3.57 lb PBXN10)		Underwater					
N4	Mine Hunting		1	200	None							
N5	Airborne Laser Mine Detection		1	48	None							
N6	Organic Airborne Surface Influence Sweep		1	100	None							
N7	Airborne Mine Neutralization		1	48	1.6 kg net explosive (PBXN110)	1 per training	Underwater					
<b>1.4.6 Conduct Maritime Interception</b>												
13	Visit, Board, Search and Seizure		1	42	None							
<b>1.5.4 Conduct Amphibious Operations</b>												
14	Small Boat Handling		1	94	None							
15	Swimmer Conditioning - Bay and Ocean with fins		1	189	None							
16	Basic Reconnaissance Course Final Mission		1	8	None							
17	Obstacle Course		1	142	None							
18	Hydrographic Reconnaissance		1	44	None							
19	Surf Observations (SUROBS)		1	116	None							
20	CRRC Inflatable Boat Small (IBS)/Surf Passage/Boat Team Organ		1	72	None							
21	CRRC Towing and High Speed Maneuver		1	8	None							
22	CRRC Bay Landing Craft Utility (LCU) Launch and Recover - Bay		1	24	None							
23	CRRC Navigation, Bay and Ocean Runs		1	26	None							
24	Amphibious Raid Course Final Mission		1	24	None							
25	Amphibious Raid Operations		3	18	Flares	3	Green Par:	M195	54		8.80E-02	4.75E+00
					Grenades	20	Grenades	M116A1	360		4.10E-03	1.48E+00

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number				CO2		
							Type	Compound	Number or Amount	Weight of Compound, grams	lbs/item	Emissions, lbs/year Total CO2
26	Direct Action (DA) Operations		3	18	9MM	1490	9 MM		1490		2.00E-04	2.98E-01
					5.56MM/38CAL	520/100	5.56 Blank		520		2.30E-04	1.20E-01
							38 cal Blank		100		9.90E-04	9.90E-02
					Diver Recalls	3	Underwater					
					Explosives	10			180		0.790	1.42E+02
					Smoke	3	Smoke		54		8.40E-02	4.54E+00
27	Craft Landing Zone (CLZ)		1	4	9MM	1240 per year	9 MM		1240		2.00E-04	2.48E-01
					5.56MM/38CAL	430/90 per year	5.56 Blank		430		2.30E-04	9.89E-02
							38 cal		90		9.90E-04	8.91E-02
					Diver Recalls	3	Underwater					
					Smoke	3	Smoke		12		8.40E-02	1.01E+00
N8	Tactical Recovery of Aircraft and Personnel		1	4	Small Arms	5000 rnds 50 cal/7.62 blanks	50 cal blank		1250		2.63E+00	
			1	4			7.62 blank		3750		9.50E-04	3.56E+00
<b>1.5.7 Conduct Naval Special Warfare</b>												
28	Swimmer/Combat Rubber Raiding Craft Over-the-Beach		4	86	Smokes/Flares/Surface Explosives	3 flares, 10 grenades	Grenades	M116A1	860		4.10E-03	3.53E+00
							Green Par:	M195	258		8.80E-02	2.27E+01
					Small Arms	6600/5000 .5 cal/7.62 mm	0.5 cal		6600		2.10E-03	1.39E+01
							7.62 mm		5000		9.50E-04	4.75E+00
29	Over-the-Beach Stalk		1	24	None							
30	Immediate Action Drills		1	12	Smokes/Flares/Surface	10	Grenades	M116A1	120		4.10E-03	4.92E-01
							Green Par:	M195	36		8.80E-02	3.17E+00
				6	Small Arms	5000	0.50 cal/7.62 blank		30000		2.10E-03	6.30E+01
31	Breacher Training		1	6	Small Arms	1400	12 gauge		1400		1.30E-03	1.82E+00
32	Amphibious Warfare Exercise		1	84	Smoke Grenades/Flares	3						
33	Mobility Primary Mission Area		1	200	Smoke/Flares	3	Smoke		600		8.40E-02	5.04E+01
34	Escape and Evasion		1	84	Smoke/Flares	3	Smoke		252		8.40E-02	2.12E+01
N9	Underwater Demolition Qualification / Certification		1	12	12.5-13.75 pound (underwater)	two sequential 12.5-13.75 pound	Underwater					
			1	12	25.5-pound (underwater)	two sequential 12.5-13.75 pound charges or a single 25.5-pound charge						
N10	Vehicle Patrolling and Testing		1	50	None	0						
N11	NSW Demolition Training: Demolition Requalifications and Training		1	12	Blast Caps/Diver Recall		Underwater					
					5 -10 pounds of C-4	1	Underwater					
<b>2.2.3 Perform Tactical Reconnaissance and Surveillance</b>												
35	Helicopter Rope Suspension Training/Cast & Recovery Operation		1	154	Smoke Grenades/Flares	3	Smoke		462		8.40E-02	3.88E+01
36	Rappel and Fast Rope Training		1	11	None	0						
37	SEAL Delivery Vehicle (SDV)/Advanced Seal Delivery System (AS)		14	40	≤ 10 lbs C-4 (underwater)	1	Underwater					
<b>4.5.6 Construct, Maintain, and Operate Logistics Over-the-Shore</b>												
38	OPDS		25	6	None	0						
39	Amphibious Bulk Liquid Transfer System (ABLTS)		10	5	None	0						
40	Barge Ferry/Causeway Coxswain Training		3	54	None	0						
41	Causeway Pier Insertion and Retraction		5	10	None	0						
42	Elevated Causeway System (ELCAS)		10	4	None	0						
43	Establish Beach Party Command Post		4	16	5.56 caliber rounds	30	5.56 Blank		30		2.30E-04	6.90E-03

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number	Ordnance		Number or Amount	Weight of Compound, grams	CO2	
							Type	Compound			lbs/item	Emissions, lbs/year
44	Sterngate Marriage to Amphibious Ship/LCU		1	40	7.62 caliber blanks	100	7.62 caliber blanks		100	(b)	9.50E-04	9.50E-02
45	LCU/LCM Beaching		1	60	None	0						
46	LCU/LCM Towing/Being Towed		1	60	None	0						
47	Communications Training		2	2	0							
48	Field Training Exercise with a Beach Camp		14	2	5.56 caliber rounds	30	5.56 Blank		30	(c)	2.30E-04	6.90E-03
					7.62 caliber blanks	100	7.62 caliber blanks		100	(c)	9.50E-04	9.50E-02
49	Maritime Pre-positioning Ships (MPS) Offload		5	2	None	0						
50	Reverse Osmosis Water Purification Unit		4	4	None	0						
51	Roll-on/Roll-off Discharge Facility		5	2	None	0						
52	MPF Utility Boat Operator Course		9	2	None	0						
53	LARC V Operator Training		6	1	None	0						
<b>4.9.1 Conduct Mission Area Training</b>												
<b>NSW Diving and Beach Operations</b>												
54	Lung Automatic Rebreather (LAR) V Closed Circuit Breathing Diving		1	126	Diver Recall	1	Underwater					
55	Open Circuit Breathing Diving		1	12	Diver Recall	1	Underwater					
56	OTB Field Training Exercise		5	36	Small arm	15000 7.62mm; 19800 .5cal ANN	7.62 mm		15000		6.80E-04	1.02E+01
							0.5 cal		19800		2.10E-03	4.16E+01
57	Rock Portage		1	20	Smoke Grenades/Flares	3	Smoke Grenades	M116A1	60		8.40E-02	5.04E+00
									60		3.70E-04	2.22E-02
<b>NSW Land Warfare</b>												
58	Land Patrolling		1	18	None	0						
59	Immediate Action Drills		1	6	.5CAL/7.62 BLANK	5000 RNDs each per operation (3	0.5 cal		30000		2.10E-03	6.30E+01
							7.62 caliber blanks		30000		9.50E-04	2.85E+01
<b>NSW Advanced Training</b>												
60	Over the Beach Insertion / Photo Reconnaissance		1	31	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		310		2.00E-04	6.20E-02
							5.56 mm blank		310		2.30E-04	7.13E-02
61	Photo Image Capture		14	4	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		40		2.00E-04	8.00E-03
							5.56 mm blank		40		2.30E-04	9.20E-03
62	Field Skills (Observation Drill, Sketching, Range Estimation)		1	24	Small arms/blanks	10 9 mm blanks; 10 5.56 blanks	9 mm blank		240		2.00E-04	4.80E-02
							5.56 mm blank		240		2.30E-04	5.52E-02
63	Stalking, Movement and Hide-Sites		5	8	None	0						
64	CQC/CQD		1	198	Small Arms	104600 9 MM simunition; 36300	5.56 simunition;					
					Small Arms	7200	9 MM		7200		2.00E-04	1.44E+00
					Small Arms	10000	5.56 Blank		10000		2.30E-04	2.30E+00
					Small Arms	7300 .38 cal	.38 cal		7300		9.90E-04	7.23E+00
					Grenades (flash crash)	3	Grenades	M116A1	594		3.70E-04	2.20E-01
65	Communications		5	6	None	0						
66	Unmanned Aerial Vehicle (UAV) Training		5	12	none	0						
67	Around the World Training		1	6	none	0						
<b>4.9.4 Provide/Execute Training for U.S. and Other Nation Units and NSW Physical Fitness Training</b>												
68	Physical Training Runs		1	464	None	0						
69	Physical Conditioning Training Exercise		1	280	None	0						
70	Swim Training		1		None	0						
71	Hell Week		5	6	Smokes	128 per year	Smoke		128		8.40E-02	1.08E+01

Scenario	Type Training	Reference	Days (a)	Operations (b)	Ordnance	Number				CO2	Emissions, lbs/year
							Type	Compound	Number or Amount	Weight of Compound, grams	lbs/item
72 Rucksack March 73 Monster Mash			1 1	54 6	Grenade Simulators White Para Flares 7.62 Blank (A111) 50 CAL Blank None None	200 per year 12 per year 27000 per year 2000 per year 0 0	Grenades Flares 7.62 mm 0.5 cal	M116A1 M127A1	200 12 27000 2000	4.10E-03 3.80E-03 9.50E-04 2.10E-03	8.20E-01  2.57E+01 4.20E+00
<b>4.12.6 Provide Industrial and Environmental Health Services</b> 74 Conduct Environmental Health Site Assessment			3	3	None	0					
<b>6.1.1 Conduct Explosive Ordnance Disposal</b> 75 Conventional Ordnance/Improvised Explosive Device Response 76 Land Mine Detection/Neutralization			1 1	120 45	0 0						
<b>6.3.1 Force Protection: Protect and Secure Area of Operations</b> 77 Field Training Exercise (FTX) e.g. SEAHAWK			14	53	0.50 cal blanks Grenades/flares M16 Rounds M60 Rounds 9mm Rounds	15650 per year 66 per year 8250 per year 8250 per year 6600 per year	Grenades	M116A1	15650 66 8250 8250 6600	2.10E-03 4.10E-03 7.80E-03 7.80E-03 2.00E-04	3.29E+01 2.71E-01   1.32E+00
<b>6.3.3 Combat Terrorism</b> 78 Small Boat Attack			1	36	.50 cal rounds	350 per exercise			12600	2.10E-03	2.65E+01

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Appendix D  
Record of Non-Applicability



**RECORD OF NON-APPLICABILITY (RONA)  
FOR CLEAN AIR ACT CONFORMITY  
Silver Strand Training Complex EIS**

**INTRODUCTION**

The U.S. Environmental Protection Agency (USEPA) published *Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule*, in the 30 November 1993, Federal Register (40 CFR Parts 6, 51, and 93). The U.S. Navy published *Interim Guidance on Compliance with the Clean Air Act General Conformity Rule* in Appendix F, OPNAVINST 5090.1C, dated 30 October 2007. These publications provide implementing guidance to document Clean Air Act Conformity Determination 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 to permit, or approve any activity that does not conform to an applicable implementation plan. It is the responsibility of the Federal agency to determine whether a Federal action conforms to the applicable implementation plan, before the action is taken (40 CFR Part 1 51.850[a]).

Federal actions may be exempt from conformity determinations if they do not exceed designated *de minimis* levels for criteria pollutants (40 CFR Part 51.853[b]). *De minimis* levels (in tons/year) for the air basin potentially affected by the Proposed Action are listed in Table 1.

**Table 1  
*De minimis* Levels for Criteria Pollutants in the San Diego Air Basin**

Criteria Pollutant	<i>De minimis</i> Level (tons/year)
Carbon Monoxide (CO)	100
Reactive Organic Gases (ROG)	100
Oxides of Nitrogen (NO <sub>x</sub> )	100

**PROPOSED ACTION**

Action Proponent: The U. S. Department of the Navy.

Location: Silver Strand Training Complex, NAB Coronado, San Diego, California.

Proposed Action Name: Silver Strand Training Complex EIS

Proposed Action Summary: The Navy proposes to conduct and enhance existing and future

readiness training at Silver Strand Training Complex to meet the evolving military mission of combat readiness. The Proposed Action would increase the tempo of training, introduce new types of training activities, conduct existing routine training at new locations within SSTC training areas, construct a demolition pit at SSTC-S, introduce new platforms and equipment, and increase access and availability to SSTC training areas.

SSTC is located on a narrow, sandy isthmus separating San Diego Bay from the Pacific Ocean in San Diego County, California. Comprising SSTC-North (SSTC-N) (historically referred to as Naval Amphibious Base [NAB] Coronado) and SSTC-South (SSTC-S) (formerly Naval Radio Receiver Facility [NRRF]), SSTC has supported naval training operations since 1942. Included in this EIS as part of SSTC is that part of the shore and near shore waters of Naval Air Station North Island (NASNI) utilized for amphibious and special warfare training, historically from sandy Breaker's Beach to the rocky Zuniga Point and Jetty.

The goals of the range enhancements are to: (1) increase training realism and diversity by supporting dynamic joint U.S. homeland defense requirements, unit and command level mission essential training elements, and non-traditional overseas deployment needs; (2) improve access to contiguous coastline and over-the-beach training areas; and (3) reduce the constraints of encroachment on training, readiness, and Research, Development, Test and Evaluation (RDT&E).

The Proposed Action addressed in this EIS combines three elements:

- Realign existing training activities to achieve training diversity and increased realism
- Increase existing training operations and introduce new training activities
- Implement range sustainability measures to enhance training capabilities while meeting conservation and stewardship obligations

Emissions associated with the Proposed Action are attributable to increases in training operations and tempo.

Air Emissions Summary: As described above, the Proposed Action includes increases in training tempo and new training activities on the SSTC range. Participants in training activities include aircraft, marine vessels, and ground vehicles. Ordnance use is also proposed for training activities.

Factors needed to derive construction source emission rates were obtained from *Compilation of Air Pollutant Emission Factors, AP-42, Volume I* (USEPA 2007), the EMFAC2007 model (for ground vehicles), the Navy Aircraft Environmental Support Office (for aircraft), and the database developed for Naval Sea Systems Command (NAVSEA) by JJMA Consultants (JJMA 2001) (for marine vessels).

Based on the air quality analysis for the proposed action, the maximum estimated emissions

would be below conformity *de minimis* levels for the SDAB (Table 2).

	<b>Pollutant</b>		
	<b>CO</b>	<b>NOx</b>	<b>ROG</b>
Baseline Emissions	200.4	176.5	52.1
Proposed Action Emissions	248.2	216.3	64.1
Net Emissions Increase (Decrease)	<b>47.8</b>	<b>39.8</b>	<b>12.0</b>
General Conformity <i>De minimis</i> Thresholds (Tons per year)	100	100	100
Exceed threshold?	No	No	No

Date RONA prepared: June 19, 2010

### **EMISSIONS EVALUATION AND CONCLUSION**

Emissions associated with operations for the proposed action were calculated based on standardized methodologies. Emissions were then compared with *de minimis* thresholds for the air basins in which they would occur.

The Department of the Navy concludes that *de minimis* thresholds for applicable criteria pollutants would not be exceeded as a result of implementation of the proposed action. The emissions data supporting that conclusion are shown in Table 2, which provide a summary of the calculations, methodology, data, and references included in Appendix C of the EIS for the proposed action. Therefore, the Department of the Navy concludes that further formal Conformity Determination procedures are not required, resulting in this Record of Non-Applicability.

### **RONA APPROVAL**

To the best of my knowledge, the information presented in this Record of Non-Applicability is correct and accurate and I concur in the finding that the Proposed Action is not subject to the General Conformity Rule.

Approved:  Date: 14 October 2010  
C. L. STATTON CNRSW 448



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Appendix E  
Public Participation



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## **E PUBLIC COMMENTS**

The Navy received public comments on the Silver Strand Training Complex (SSTC) Draft Environmental Impact Statement (EIS) via four media: written comments, information station comments, website comments, and oral comments. Regardless of the medium, all comments have been treated equally. The comments are from the public comment period (January 22, 2010 through March 9, 2010) and the public comment period extension for the document (March 9, 2010 through March 30, 2010).

Comments were received primarily through the mail, website, and orally or at information stations at the public hearings. Written comments were submitted directly to the Navy. Website comments were submitted to the Navy via the project website. Oral comments were taken directly from the official court reporter transcripts. The comments have been reproduced faithfully and as accurately as possible. In some cases, the editors may have made minor errors in the translation of some handwritten letters. For this reason, a copy of each of the comments has been placed in Appendix E. Private individuals are presented first and are sorted alphabetically. Comments submitted by organizations are then presented, also in alphabetic order. Appendix E also contains the official court transcripts of the oral comments made at the public hearings. Website and information station comments were electronically submitted and copied directly into this Appendix, so no other reproduction was necessary.

In preparing the Draft EIS each resource section was prepared and reviewed by numerous qualified individuals, each specialists in their respective fields, to ensure that the resources and issues received a rigorous and thorough assessment. The best available scientific data and the latest peer-reviewed studies were considered.

In this Final EIS, the Navy has made changes to the Draft EIS, based on comments received during the public comment period. These changes included factual corrections, additions to existing information, and improvements or modifications to the analyses in the Draft EIS. This section presents the public comments received and the Navy's responses to these comments. The public should note that these changes are non-substantive and do not result in any significant modifications to the proposed action, the alternatives considered, the affected environment, or the environmental effects analyses of the Draft EIS.

Although all comments have been read and considered, some comments were not specific regarding the analyses or the alternatives in the Draft EIS and, therefore, could not be given specific responses and are not reproduced in Appendix F. As stated in the Council on Environmental Quality's (CEQ) Regulations for Implementing the National Environmental Policy Act (NEPA), 40 CFR Part 1503.3(a), "Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both."

To allow side-by-side review of the comments and the Navy responses, all comments have been converted to text and entered into a table format that follows in Appendix F, with the comment in one column and the Navy's response in the next column. Comments are presented in the same order in Appendix F as they are in this Appendix.

### **E.1 COMMENTS FROM PRIVATE INDIVIDUALS**

The comments in this section were received in written form by organizations, agencies, tribes and individuals.

### E.1.1 William J. Adams

William J. Adams  
P. O. Box 181458  
Coronado, CA 92178  
(619) 233-3025

March 5, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> floor  
San Diego, CA 92132

Re: Draft EIS for Silver Strand Training Complex – **Section 3.8 Fish**

Dear Mr. Randall:

This letter is in regard to the Silver Strand Training Complex draft EIS, dated January, 2010. The comments are in reference to Section 3.8 Fish, specifically in regards to SAND CRABS along the Silver Strand beach and Coronado beach.

Here is some information about myself. I am a surf fisherman and have fished in Coronado and on the Silver Strand since 1949, along with many others. I have provided, at the end of this letter, the names and telephone numbers of some of them who are still alive and continue to fish, so that you can contact them if you wish to do so.

Besides these people, you may want to contact the following and ask the question, “who is this guy.”

Larry Kracht	(619) 435-9027
Tom Smisek	(619) 435-3710
Frances Adams	(619) 435-2923

For those who do not know what sand crabs are, they are the primary food for fish, sharks, rays, birds and specifically Corbina (during the summer months). The Corbina is a primary fish that surf fisherman are after during the summer. However, during a GRUNION run, they are the primary food for large Corbina and Halibut.

FACT: Over the last six or seven years the population of sand crabs has dropped to almost zero. Any surf fisherman can tell you that. Of course, there are lots of theories of what has caused this. Some people believe it is because of the raking of the sea weed off the beach, etc. But the Navy does not do this along their beach and still there are no sand crabs.

The primary question that should be answered is why there are sand crabs at Imperial Beach, Mission Beach, Carlsbad and Huntington Beach.

I believe that one of the major problems is the fuel emissions from the boats, etc., along the Silver Strand beach is the cause of the problem.

What I am asking for is the following:

- (1) Delay for at least 60 days before this report is final so that other fishermen can comment on this draft.
- (2) The City of Coronado updates its water pollution equipment to measure the fuel emissions along Coronado beach.
- (3) Have an independent, scientific statistical study (at some level of confidence) to find out what happened to the sand crabs along Coronado beach. Maybe SDSU, SDU, or UCSD could perform this study with the funds being provided by the Federal Government.
- (4) Until this study is completed, stick with ALTERNATIVE I, NO ACTION ALTERNATIVE.

Following is a list of the fishermen you may want to contact:

Tom Williams	(714) 964-4434 **
William Adams	(619) 435-2923
Ernie Mauro	(619) 887-1076 **
Russell Elwell	(619) 435-3833 **
Tom Noonan	(619) 435-4097 **
Tom Jeter	(619) 437-4646
Tom Christenson	(619) 435-7176
Wilson Whitmire	(615) 591-5289 **
Capt, USN, Ret.	

\*\* Surf fishermen since 1949.

Sincerely,



William J. Adams

**E.1.2 William J. Adams**

William J. Adams  
P. O. Box 181458  
Coronado, CA 92178  
(619) 233-3025

March 27, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> floor  
San Diego, CA 92132

Re: Draft EIS for Silver Strand Training Complex – **Section 3.8 Fish**

Dear Mr. Randall:

Thank you very much for extending the comments (to the Draft EIS) until late March.

This letter expands on my comments to you dated March 5, 2010 on Section 3.8 Fish. Since then, some fishermen and others have asked me to add the following comments:

- (1) Sand crabs feed on tiny “plankton”.
- (2) A female may produce thousands of eggs. She carries them until the eggs hatch. For two to four months, the “larvae” drift as “plankton”.

What I believe is that these and other types of “plankton” are being killed by fuel emissions from the boats, etc. Along the Silver Strand Training Complex, since the Navy has expanded the use of the beach over the last six to seven years, the water has become more polluted from the fuel emissions.

What I am asking for is that until some studies are conducted to determine what has happened to the sand crabs, the Navy go with the “NO ACTION ALTERNATIVE”.

Sincerely,



William J. Adams

### E.1.3 Barbara Angioletti

Representing: Private Individual

Organization:

Name: Barbara Angioletti

Date: 3/30/2010 11:43:06AM

Subject: Military Training Activities

Comment: As a resident of Coronado for 15 years I have witnessed the increase of military training & understand the importance of this to protect our country. I have read the proposal in re to the increase of training & in my opinion the increase is tremendous!!! Yes, you need more training but you also have to consider the area that this is in. We want our children to have the best & not hear the helicopters, etc. all day long. The military housing is in this area & the families there will have to live with these noises. I do believe you have to increase the training but not to the extent that you are proposing.

### E.1.4 Anonymous

Representing: Private Individual

Organization:

Name: anon anon

Date: 2/23/2010 11:49:32AM

Subject: Other

Comment: The EIS file is large and hard to download.

**E.1.5 Virginia Aspe Armella and Eduardo Cortina**

March 19, 2010.

Naval Facilities Engineering Command  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I am a resident of Coronado and I live in Coronado Shores, Cabrillo Building.

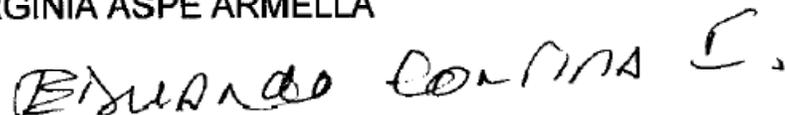
I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center.

Suggested comments: I would appreciate your cooperation and efforts to maintain the quiet enjoyment atmosphere of the Coronado Shores, Cays, and Village as it currently exists.

Sincerely,



VIRGINIA ASPE ARMELLA



EDUARDO CORTINA I.

## E.1.6 Andrew Bailey

Representing: Private Individual

Organization:

Name: Andrew Bailey

Date: 3/10/2010 3:00:21AM

Subject: Environmental Justice

**Comment:** Overall, after perusing the SSTC Draft EIS, I still want to be super-supportive of the Sailors and Marines (DofN) but have exceptions to some of the proposals and assumptions in the EIS. I realize that training these forces well will be good for the environment in the aspect that they will be able to wage war more efficiently. Still, we – they – are at war, and there will be “unavoidable adverse environmental effects.” I was impressed and entertained by the EIS and support Alternative One but suggest more consideration in the following areas:

- Contingency plans for Alternative Two
- Public notice about public access to beaches
- Notice about nighttime activities
- Mitigation measures in land use and detonations

Please, send a strong message by making contingency plans to implement Alternative Two. DofN should be ready to go a level higher to achieve objectives, and still have best practices. I also encourage beach activities “not limited to any day of the year” (3.1.2.2.2). [Did a lawyer write that?] At the same time, DofN could keep us civilian-beach-patrons informed about open beach hours. Perhaps the EIS Website can be converted into a beach-recreation information platform, with the option to call the NBC switch board. This would count as a land-use mitigation (3.1.1.7). If you’re having a party, you invite your neighbors.... Unfettered access to wet-sand areas on – say – four (4) daytime ultra-low tide events (-1.5’ or more), and a couple daytime ultra-high tide events (6.5’ or more) is fair quiet enjoyment. Concerted planning is already a protocol (5.15.3-4). Occasional access to Breakers Beach up to Zuniga Point seems fair too. The SP, duty assignments, and service members with restriction can keep civilians below the high-tide line. Perhaps DofN, in all its magnanimity, could share a drinking fountain, or a toilet. Look at the MAS Mira Mar Air Show. A staff member for this EIS, Alex, who like myself, enjoys beach running, did not know that we have access to most wet sand areas when there are no SSTC training activities. I carefully questioned another staff member about this (Bruce), but it seems contradicted by the EIS (3.1.2.2.2). I wish the beach entrance between SSTC-N & Coronado Shores was better marked with a fair sign. I noticed that the SSTC-N lease extends only to the mean high tide line but shifts to “100 to 500 feet offshore.” I can share the beach. Coronado residents should have advance notice about night operations so they can have the option to spend the night elsewhere. SSTC needs to have better communication with civilians and a website as a beach-recreation information platform could serve day-to-day needs. Overall, the lands leased by the DofN spend more time unused, than with activities. Mitigation like restoring beaches after activities is expected and training protocols help, but the fact is that activities will increase 20% - other mitigations should be considered to offset this increase. I read that one mitigation measure is to manage predators. An extension would be to coerce other beach users to observe a higher level of stewardship. DofN with its unfathomable resources needs to outreach. SSTC spends most of its time as an absentee landowner. Bruce, an EIS staffer, explained that dog owners loose there dogs in the training areas. Dogs (and cats) area a terror to wildlife, wreak habitat, and leave damaging feces. Off-the-leash dogs are a problem city-wide and on the beach. One section mentioned “avoidance and minimization.” I could see a special program with the Cays, educational signs, and volunteer enforcement. MAYBE Cesar Milan would lend a hand. Other mitigation was dismissed in this EIS “alternative” (5.9.3). Third-party observers are a cultural norm in the United States today: some people would kill Flipper for a tuna sandwich! There’s no excuse for not trying to manage it, especially considering the extremity of the action. I’d be pleased to say a little prayer for the fish: that they fatten the beachmaster. I can see Point Loma from my house, and my neighborhood’s topography is in one of the charts. The Strand may be my home break. I could write more.

## E.1.7 Richard Barck

Silver Strand Training Complex EIS – RESPONSE

To: Naval Facilities Engineering Command, Southwest

Attn: Mr. Kent Randall, Silver Strand Training Complex EIS

1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor, San Diego, CA 92132

From: Richard Barck 86 Kingston Court West, Coronado CA 92118



March 3, 2010

**Subject: Response to Draft EIS, SSTC**

I have listed below a number of points related to Navy anticipated use of SSTC-S which cause me concern:

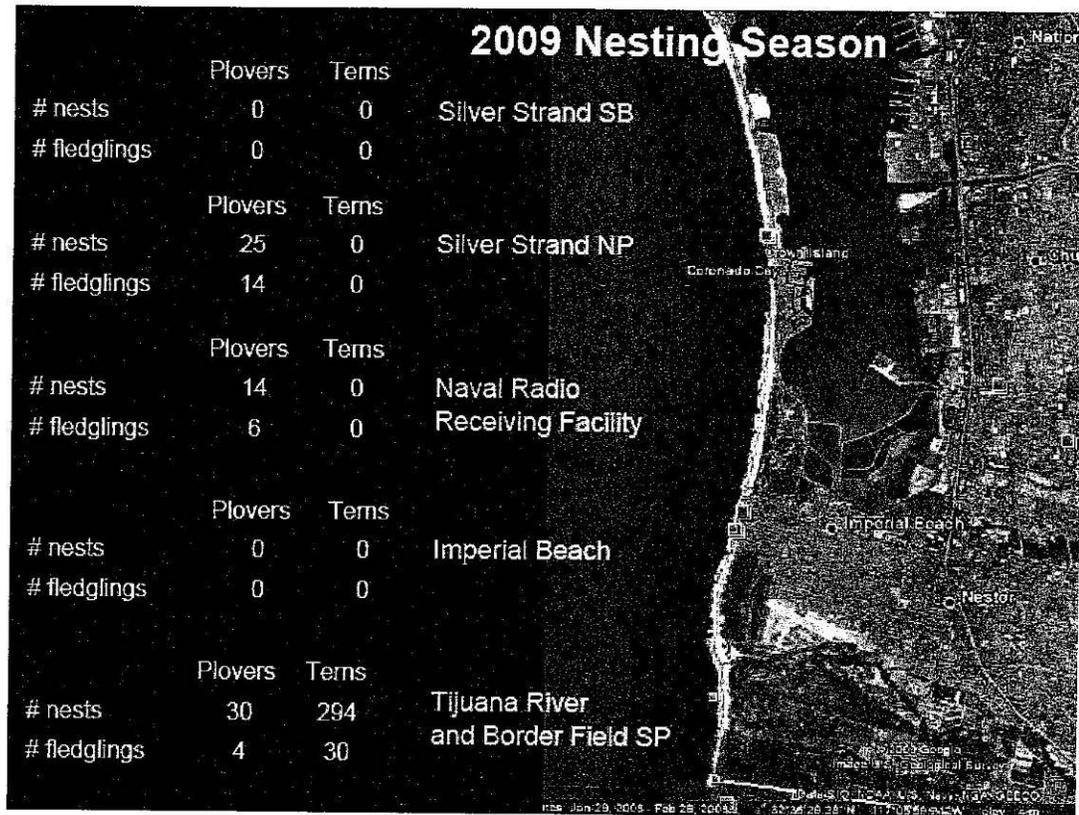
- 1) **SSTC -S (nee NRRF)** – The Navy comments that SSTC has been established for over 60 years is disingenuous with regard to stating the local residential community around SSTC-S “should expect air and ground noise” in the proximity of the base. For residents building/purchasing homes in the SSTC-S/NRRF area, there was nothing more quiet than a radio receiving facility. **SSTC-S was renamed from NRRF (Naval Radio Receiving Facility)** during the period of the EIS study. The Federal Register of August 6, 2001 describes the **Notice of Intent to Propose EIS (pp. 41009-41010)** as including the NAB and the NRRF. In fact several references in the EIS still refer to NRRF, not SSTC-S (e.g., Fig. 3.11-4).  
Any training of amphibious landing and helicopter support has taken place **only** in the past few years. And it is NOT quiet – per the EIS, noise from both munitions and helicopters is projected to dramatically increase. This should NOT be done in a residential zone.
- 2) **Helicopter, Aircraft & Amphibious Noise** – As residents local to SSTC-S we live in a particularly quiet area, especially during evenings and nights. There is relatively little traffic on CA-79 and many of us have doors/windows open to the sounds of breaking waves. Over the past couple of years we have been increasingly subject to LOUD helicopters/aircraft flying “close” to our homes. The sound prevents us from hearing evening TV -- or awakens us at night. When awakened, we often cannot immediately return to sleep. The noise could be greatly reduced by flying the helicopters/aircraft further offshore while on sorties north/south along the Silver Strand. We, as well as the residents of Navy housing, would appreciate that very much!
- 3) **SSTC-N** – The portion of SSTC now called STTC-N (but formerly NAB) has been used for amphibious landing training for an extended period. Increased amphibious landings, helicopter activities and munitions training should be restricted to Boat Lanes 1 – 10.
- 4) **Snowy Plovers** – Fish & Wildlife has formulated a significant effort in the last few years to increase Snowy Plover nesting/fledging in the SSTC -S area. *Results for 2009 are in the table on the following page. Silver Strand SB is the beach area with overnight facilities for RVs and heaviest beach use. Silver Strand NP contains staked-off area protecting nesting for the Snowy Plovers and Least Terns.* The Navy should also be aware of the success in nesting and fledglings in the SSTC -S/NRRF.
- 5) **Vernal Pools and Fairy Shrimp** – Vernal Pools are becoming few and far between, both as a result of drought and/or heavy pedestrian or vehicle use of the area(s) where they are found. There are very good protected Vernal Pool locations within SSTC -S/NRRF.  
Although the Navy has said that these area would be “protected” while wet, they would be used as trails and subject to traffic during “dry periods”. Trails through Vernal Pools will effectively destroy them! They should continue to be protected.
- 6) **Beach White 1 / Boat Lane 11** – From the view in Fig. 1-3, the training area appears to encroach on the southern edge of Silver Strand State Beach, an especially significant area for nesting of Snowy Plovers.
- 7) **Beach Access** – Many morning walkers and joggers use the Silver Strand NP as their starting point for extended exercise. A significant number continue these workouts headed south to the Imperial Beach area – or vice-versa. The access past NRRF has been through the sand area below the high tide line. The apparent closing of this area deprives the public of even more beach access in a beach-limited area.
- 8) **Silver Strand State Scenic Highway and Scenic Highway Overlay Zone** – What impacts will the increased activities have on CA-79 as a scenic highway in this area?

Page 1 of 2

Silver Strand Training Complex EIS – RESPONSE

- 9) **Silver Strand Elementary School** – What effect will the escalated training have on our elementary school including noise and pollution affecting our students and teachers?
- 10) **Surf Camp** – The surf camp at the southwest end of the NRRF site serves ~ 10,000 kids/year. We would like this to continue and their access to the beaches to remain safe and free of pollutants.

Thank you.



**E.1.8 Edward Baumer**

I am a resident of Coronado and I live at Coronado Shores in El Mirador and overlook your facility from the 16th floor. The address is Ann Kennedy, 1820 Avenida del Mundo, #1603, Coronado, Ca 92118.

I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I hope that you can provide the level of quiet enjoyment that I have experienced for the last 8 years as I am a full time resident.

## E.1.9 Michael B. Baxter

Kent Randall 3/9/2010  
Silver Strand Training Complex EIS  
Naval Facilities Command, Southwest  
1220 Pacific Highway, Building L, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I appreciate the opportunity to offer some further input and perspective on the proposed expansion of activities which will occur in the Imperial Beach area and Silver Strand Training Complex (SSTC).

As a matter of disclosure, I have reviewed the letter sent to you by the City of Imperial Beach dated March 5, 2010, and agree with their observations and requests.

My comments herein should be considered in addition to theirs, and will be, I believe, concordant with them. I also have had the advantage of living on the oceanfront on South Seacoast Drive, north of Ream Field and south of Imperial Beach Boulevard for roughly the past 38 years. My comments are based on that period of observation.

My first observation is that helos departing Ream Field do not maintain the centerline of the runway, or projection of it, from the field or landing pads

1. all the way out to sea for a distance of about 1<sup>3</sup>/<sub>4</sub> miles.

which I believe is the prescribed route for a visual departure (VFR Rules of Departure). I have publically asked for a copy of these departure rules in public in the past and they have never been provided. I hereby ask for them again under the Freedom of Information Act.

Instead of following the VFR departure rules, too many times the aircraft drift off their departure radial, towards the Pier. My observation, and that of others, is that once they are over the surfline too many times they begin their turn toward the north and head for the pier. This turn should not be commenced until the seaward track is complete, about  $1\frac{3}{4}$  miles.

Many of us have observed many helos well inside the end of the pier. They then turn to sea again to "get around" the end of the pier before continuing north.

All this could be avoided by simply following the VFR Departure Rules, as I believe I've seen in the past.

I would also ask that the VFR Departure pattern be amended so that departing helos continue to climb, perhaps to 450-500' as they depart Ream Field. This would also reduce noise considerably.

2. let me address the night hours of operation next.

I agree with the City's position (Item 4b) that "there should be no helicopter training at Ream Field after 9:30 pm."

I understand that from time-to-time a helo goes off course in its VFR departure from Ream Field. But I believe that far too much of this occurs and the community and residents are unable to effectively document this for the Navy with the present Complaint System.

It is a system which has failed you and costs the Navy in public support and goodwill.

With the proposed increase in flight operations out of Ream Field, I recommend the following:

1. Place the officer who takes Citizen Complaints related to Ream Field Helos in the Ream Field Tower, or a location very close by so he can easily determine the probable sidemumber of aircraft over the beach. Require that the aircraft commander 'report' the completion of his seaward track when he is  $1\frac{3}{4}$  miles out, back to the Tower or Duty Officer. Remember that a citizen can NOT often see the sidemumber against the setting sun, twilight or night-time conditions. This step would materially improve a complaint system which most of us rate as nonresponsive and a failure.

3.

2. Require that the Citizen Complaint Officer stay at his post during his watch period. I would presume that these are four hour watches when flight operations are underway. He can bring a bag lunch, or a box lunch can be provided him. The main point is that he/she is there to receive citizen complaints as they are occurring, not sometime later, from some very distant spot.
3. He should provide some sort of file number to the caller for future reference or follow up.
4. The results should be reported to the community, perhaps quarterly, to inform the policy-makers and the citizens.

I wish to acknowledge that many departures out of Ream Field are correctly done now, day and night both. And further, we appreciate everything which the military does to protect and defend this nation.

By the same token, we should be willing to receive and take to heart constructive criticism when it is warranted. I offer my observations and comments in that spirit.

Sincerely,

Michael B Buxler

1192 Seacoast Dr

Imperial Beach, Ca 91932

### E.1.10 Jim Besikof

Representing: Private Individual

Organization:

Name: Jim Besikof

Date: 3/1/2010 5:07:57PM

Subject: Noise

Comment: I attended a briefing at the Coronado Cay Homeowner Association of your plans. After looking at the new fly patterns, your new plan will cause a lot of additional noise, in an already heavy fly over zone. Please reconsider your plan and move the flight patterns out to sea as far as possible. Thank you, Jim Besikof

### E.1.11 Fred Brown

Representing: Private Individual

Organization:

Name: Fred Brown

Date: 3/25/2010 9:07:39PM

Subject: Noise

Comment: I have lived here for 17 yrs and until reasently found the Navy to be good neighbors. I appreciate the work you do and support your efforts. But... about a month ago after your announcement of planned increases in training the air activities and noise have become overwhelming to the point of intimidation. If this is a test to see how much noise we can tolerate , you have exceeded my threshold 4 weeks ago. I am very concerned that this will affect our quality of living and negatively affect our property values....Fred Brown

### E.1.12 Pat Brunson

Representing: Private Individual

Organization:

Name: Pat Brunson

Date: 3/26/2010 7:40:46PM

Subject: Birds

Comment: The noise from the helicopters is quite bad at our house but I can't imagine how all the birds in this area can take. Plus the air pollution from that pink smoke floating over the Strand can't be good for us or the wildlife.

### E.1.13 Elizabeth Butler

Representing: Private Individual

Organization:

Name: Elizabeth Butler

Date: 3/10/2010 2:03:57AM

Subject: Noise

Comment: Your system has lost two letters today....one just now. It is too late tonight to redo it. What seems to be the problem? Thank you- Liza Butler 619-405-1500

### E.1.14 Elizabeth H. Butler

Representing: Private Individual

Organization:

Name: Elizabeth H. Butler

Date: 3/30/2010 1:47:52PM

Subject: Noise

**Comment:** Mayor and City Council City of Coronado Coronado, California March 2, 2010 Dear Mayor Lanaka: The letter below reflects several previous attempts to address the problems caused by intensified military air training over the Silver Strand. The current level of training has seriously impacted residents and visitors since 2007. We have not received any answers to reasonable questions or been asked to participate in co-creating alternatives. There are clear alternative helicopter routes and obvious means of notification and community education that would ease of the stress we live with. Only a few weeks ago we learned that we are part of a newly named Silver Strand Training Complex (SSTC) with high intensity, high profile maneuvers planned along the length of our State designated Scenic Route 75. Many City, County, and Federal funds and tireless volunteer and staff time and multiple interagency collaboration has gone into preserving the Silver Strand's scenic views, natural resources and unparalleled recreational and residential opportunities for military and civilians alike. Similar to the goal of the National Wildlife Refuge, we thought this area would be an outdoor haven for people and families in perpetuity. The projections in the proposed EIS do not reflect an understanding of this City, State and County mission, but rather suggest a militarization of an area previously shared with residents, visitors and the natural environment. In closing this memo, I would like to emphasize one of the most troubling aspects, perhaps the most egregious aspect, of the EIS. The increase in helicopter operations from 700 to 2300 is in addition to the current daily low flying helicopters that fly back and forth over the eastern shore of the Cays, Grand Caribe, Loews, and the State Park during peak hours 3-10pm. In the summer, they can do circular patterns every four minutes, often going later in the night. Perhaps, this routine helicopter exercise is an area where we can dialogue with the navy about 'balance' and community respect for their neighbors of forty years. Thank you for considering this background. It is pasted below as well as sent in an attachment format. Liza Butler

Representing: Private Individual

Organization:

Name: Elizabeth H. Butler

Date: 3/30/2010 1:55:32PM

Subject: Noise

**Comment:** August 2009 Mark Ochendusko, City Manager City of Coronado Coronado, California 92118 August 2009  
 Re: MILITARY TRAINING OVER THE SILVER STRAND Dear Mark, This is a friendly request for public information. It would be very helpful if you would facilitate the process of obtaining answers to the following questions: What AIR TRAINING is planned for the peak summer months July - October 2009? What part of this is 'routine' NBC practice? What constitutes 'routine' flying: what are the designated patterns or paths; what are the allowed weekday daily start and end times; are there different paths or curfews for weekends and holidays? What is the allowed or legally mandated flying height for helicopters over densely populated residential and recreational areas (i.e., how many feet above rooftops and bathers on a beach is considered safe or even 'courteous'? ). Are there safety height regulations set by the FAA and are there military exemptions? Are there other FAA regulations that say helicopters should fly a certain distance from the bay or ocean shoreline? Are the helicopters who fly round and round paths up the channels of the Cays performing a sanctioned practice? What part will be "SPECIAL" TRAINING MANEUVERS involving squadrons whose home base is located elsewhere? What are the start and end dates of the 'special' maneuvers? What time of day will they begin and end? Will the impacted time be the same for weekends as weekdays? Are major holidays included? When there are AIRSHOWS (e.g., Redbull Races, Miramar Airshow) or ceremonial demonstrations (e.g., off the Midway museum) in the San Diego area, routine military practice and/or practice for the special event are often diverted over the Cays and the Silver Strand. What is the summer/fall schedule for these activities?  
 \*\*\*\*\* In the last two summers, the residents, real estate rentals, and other tourist businesses were not notified or prepared in any way for the negative impact of continuous low-flying helicopter and jet practice. This air activity is in addition to the advertising, fixed-wing planes which go back and forth above the State Beach and Park and often crisscross the Cays during summer months. The 'surprise' element of the last summers intense air activity evoked a range of negative emotions: fear from the 'high alert' noise and vibrations of helicopters; anger from having special family events and vacations ruined; and disbelief that all this was happening without notification from the City or any known public planning process. Trying to get information was difficult. People were referred to the navy control tower to make a "noise complaint" and asked to produce photographs of the plane, the number on the plane, the time and direction of the flight. The problem was not the disturbance produced by an aberrant, ill-trained, low-flying pilot. THE FEAR AND DISTURBANCE CAME FROM MILITARY TRAINING THAT COMBINED ROUTINE PRACTICE WITH INTENSIFIED SPECIAL MANEUVERS OVER A HIGH DENSITY RESIDENTIAL MARINE COMMUNITY, ABOVE A POPULOUS STATE BEACH AND A 450 ROOM HOTEL-RESORT, SCHEDULED IN THE HOTTEST, PEAK USE SUMMER/FALL MONTHS. This inquiry is a request for information. It is also a request for some 'balance' and courtesy in the planning of training exercises. My experience with the military in recent years was that military leadership valued the commitment to be 'good neighbors' to impacted communities. Last summer, the Navy was not a good neighbor; it exploited our previous goodwill and caused us many problems. Perhaps, leadership in the military and the City have attempted to address these problems in their monthly meetings. It would be helpful to know if the environmental impacts of air training are discussed and planned for in these meetings. Thank you for your help. Respectfully, Liza Butler 13 Kingston Court East cc Loews Coronado Bay Resort Silver Strand State Park Beach

### E.1.15 Harry Butler, Ph.D.

**Representing:** Private Individual

**Organization:**

**Name:** Harry Butler,PHd

**Date:** 3/9/2010 6:30:32PM

**Subject:** Noise

**Comment:** It seems foolish to me that the Navy would jeopardize the health and welfare of local residents in order to prepare to fight those who wish to damage the health and welfare of Americans. There seems to be no recognition in the Navy's plans that piercing noise, especially helicopter noise, will cause harm to local residents including local Navy families. It isn't necessary for helicopters to fly low over homes and continuously circle over the bay, state beaches and residential communities regardless of nighttime hours, weekends and holidays. This routine practice which intensifies in the hot months is not necessary. Helicopters can fly over the ocean. The residents of South Bay have worked their entire lives in order to save sufficient money to live in this desirable community. We are hard working, patriotic, taxpaying citizens who deserve better treatment than what has been occurring over the past three years and what is being proposed now. Currently, helicopter noise causes nervousness, inability to relax and loss of sleep. There is a certain arrogance in the Navy which allows these unhealthy intrusions into private living space with no notice or consideration. I beseech the Navy to do two things: 1) Give additional time to the community to comment on this plan and make carefully researched suggestions. 2) Work with the community to consider alternatives to the noise and pollution impacts of current air training as well as the other more egregious elements of the proposed plan (as highlighted in the City's response). A cooperative plan that genuinely considers human needs for health, comfort and security would be a plan that benefits military families at the same time it benefits other local families. The Navy bruised its standing and respect locally by issuing an EIS that suggested that Americans employed in the military should "sleep in their own beds" while other Americans' sleep is dispensable. Please consider our needs as one. I

## E.1.16 Cynthia Buxton

Mr. Kent Randall  
Naval Facilities Engineering Command Southwest  
Code: OPME  
2730 McKean St. Bldg. 291  
San Diego, CA 92136-5198  
March 8, 2010

*Abstract and summary of the first three pages: It is not to say that there is not a win-win to what the Navy intends to do, but to impart on you in the only, and I know, lengthy way I can manage to articulate, that what you and I have here is very, very special and very unique in the weird world, -a diminishing natural world, -of Southern California. It would be honest to say that over the course of 2 decades when I was looking for the lucid and rational, and peaceful on short order, I came here.*

Dear Mr. Randall:

I am the adoptive parent of the proposed Eagle Peak Wilderness, a position that came as an outgrowth of some volunteer work documenting, leading hiking outings for the Sierra Club, and photographing the remote unseen and wild portions of San Diego Backcountry. The people who have heard me endlessly speak of the beauty of San Diego in recent years was with respect to the many waterfalls, and breathtaking vistas in our back country up in the mountains of the Julian area. I probably have thousands of pages, as well as thousands of photos, out on the net on this subject. But what most people do not know about was the life before the waterfalls.

Today I am speaking purely on behalf of my self as a homeowner in Imperial Beach, and twenty year runner/walker on the Silver Strand State Beach.

I used to live in North Park and still have a home there. My former husband is a friend, life time resident of San Diego, and grew up in La Jolla. His brother is a commander. His great uncle was a four star admiral, the late Admiral Voth. There have been many significant people in my life in the Navy at all ranks. In San Diego who couldn't say this?

A long time ago I lived a very different life in Myrtle Beach, S. C., at that time an air force base. I don't want to recount the times I almost wrecked a car from over fascination with the things flying in perfect formation above. What I will tell you is that one day, bathed in oil and sweating in the sun on the beach, I had had enough of just sitting still in pretentious tanning. I hired a baby sitter to play with my son long enough to try running. At that time I was about wiry 70 pounds less than today. The first day, pacing myself I ran from Myrtle Beach State Park to a certain large hotel in Surfside beach. I rested only momentarily and ran back. Barefooted. Within the month I was running six miles in 50 minutes two or three times a week from the state beach to what was then the Holiday Inn in Surfside Beach, and back without stopping. Barefooted. I knew very quickly what part of the sand would provide the proper cushioning (where the water meets dry sand). I probably had about 400 miles there before I moved here.

Running in that capacity is like flying. I wish I could do it now. I developed a unique, almost personified, relationship with the beach where I ran, nearly always, barefooted. There is nothing else like this. AT that time there were long sections of uninterrupted beach that had not been developed. I think there is at least one ranger at the Myrtle Beach State Park that was a bait house clerk at the time, that still remembers.

When I moved here I wanted to continue running. I ran quite a bit at what was called Blacks. This was a very interesting experience for a shy southern girl. In spite of the crazy new Californians, however, that existed on that beach, I was often uniquely the only female running, (in shorts) and barefooted. I still wanted somewhere to run that was like home. Pacific Beach came next. It was crowded, commercial, though delightful in many ways, the sand is very hard. One day I ran at Coronado. I knew I was getting warm but the parking, crowds, and even affluent neighborhood was not the relaxed escape I was searching for. When I got to Silver Strand I *was* home. I probably have well over a 1000 miles running and walking there over the next many years. Even when I was exploring the back country, a short escape was to take off for the strand, run to "tha big round thing" or on a better day to the pier to chat with someone named "Clemente", eat the best tacos this side of Ensenada, run back stopping long enough to admire the local art at the end of Palm on the children's wall and water fountain. (now relocated behind the Mexican restaurant at 3<sup>rd</sup> ave in a little mini park)

Whether the back country or at Silver Strand, one of the most difficult tasks is to define the difference between "unspoiled" and "mitigatable" or mitigated, or even urbanized to the regular guy who is content with a beach to kick back and read a paper or body surf upon. Rightfully so.

For a place that is truly untouched *there is no* Mitigation. Once you compromise on true unspoiled -off the urban-matrix this status no longer exists. It is basically the equivalent of multiplying by 0. I find that most people in the city urban environment do not thoroughly grasp what that is to be completely in a spot that is still really natural and at its mercy or better yet comfortably integrated with its natural laws. **Even more difficult is to explain why this is so coveted and desired by the people who speak up for it.**

The pristine wild is the caviar and 5 star drooled upon talked about and near worshiped of the people who go there; the medicine and meditation of water gurgling in memory for days after exposure. This one, otherwise labeled, "in town", square, flat, smooth, pre-traversed, thoughtlessness -imposed and determined by halls, sidewalks and roads, is the fake. For what its worth, it is the knowledge of the true off the matrix world, thus far, more beautiful than a thousand star hotel, that both sustains and empowers, prevailing through the worst of social propriety, or embarrassing lack thereof. It may not be the mental status of military trained focus or hierarchical reverence, but perhaps

a brief juxtapose debriefing, as scaling of diverse, and absolute self reliance, a self perspective to all else still wild in true form. What is this to a service man home from the wild of war?

The beach between the SilverStrand State Beach and "the big round thing" , I now know, thanks to this action, is called "the elephant cage" , is not quite at pure unspoiled status. However in San Diego given the nature of all of the other beaches it is absolutely remarkable. It was even voted in a poll on wild beaches, as number 7 in Southern California. (Blacks, or Torrey Pines State Beach made the list at 3)

I recall fondly the effort that took place on the South Carolina beaches to reestablish dunes and a plant called sea oats, that effectively glues them together, when for a time they were taken for granted.

At a 200 or so dollar fine for picking a sea oat or two, they are no longer taken for granted. The mundane now promoted.

Here in one of the densest parts of the CON-USA lays one of the most diverse counties, species- wise, in the nation. This little treasure of dunned and relatively unspoiled isthmus, at least un-urbanized beach front for many miles ; it is the only place reminiscent of the eastern long wind swept wild beaches that seemed to stretch and dissipate almost mysteriously and magically into blue and grey salty misty sky and floating liquid sand.

The first time maybe 14 years ago I thought to jog on the fourth of July I was in for the learning of a well kept secret. Even though no parking was to be had at the State Beach, and confiscating one a serious effort in Imperial Beach, once I broke free of the crowd running north of the elephant cage, I saw on the busiest day of the year about 3 other people. That number has grown, but not much. It may stand at 2 dozen, over the course of three miles.

**It is not to say that there is not a win-win to what the Navy intends to do, but to impart on you in the only, and I know, lengthy way I can manage to articulate, that what you and I have here is very, very special and very unique in the weird world, -a diminishing natural world, -of Southern California. It would be honest to say that over the course of 2 decades when I was looking for the lucid and rational, and peaceful on short order, I came here.**

Long story short, in a year when 200,000 thousand acres of unobstructed natural beauty are being threatened in far more senseless rational, by steel and voltage, it seems as though there is no place left to un-attach and be, or whose activity isn't left personal and creative.

To my much unaware lack of newcomer saavy, my then husband and acquaintances were much surprised that I would pick, of all places, Imperial Beach as my heartthrob. They were fully integrated into the beach at La Jolla and any where else they pleased. By and large, Imperial Beach was not the social climax on the societal register with people who grew up in LaJolla. I am ok to leave it that way. San Diego is blessed with awesome public beaches. Ironically only 10 miles away, the five star Hotel Del Beach has won number one and number two beach status in the world only second by one authority travel magazine, to Poipu in Hawaii.

However none are like this one, not even close. When the opportunity presented itself, I moved in.

When I discovered the even bigger secret that we sit next door to one of only two National wildlife estuary refuges on the west coast, I knew all too well what that meant. I have a BS in Biology from a marine biology school at UNCW and did my senior honors paper research on copepods. (Diapause eggs of *Anomolocera ornata* Sutcliff, UNCW and the Student paper CANCUS for the North Carolina Achedemy of Science) I thought I would never have an opportunity to bring this chapter up from the past. Many marine critters that make an environment diverse and healthy depend on estuaries, either directly or indirectly, for their start in life. The estuary is essential to the life of the ocean near the shore. The health of what we have here if it works the same may be extremely critical because it is *all* we have. When I did plankton tows for my paper the water was teaming with copepods one week and the tiny newborn stages of many fish and crustacean species the next. We speculated then about the protection of the enormous estuaries in the Wilmington and Wrightsville Beach areas that played into the life cycle of the copepods and in turn their eventual position as food for the early days of newborn fish and crab zoea among other things.

**Does this happen at the Tijuana estuary as well?** This needs more research.

The navy , and the military in general have become very good environmental partners.

**What can the Navy do to keep the wild quality at a maximum albeit the times it is using the beach for exercises? Are there covert training maneuvers that are more subtle or invisible, and less impacting to the land? Is there a way the local public might help or become a part of the solution? What activities could be done south of the first jetty on the public beach? Could the public be involved in mock rehearsals? And thereby reduce the impacts north? Would the Navy make use of the resources at the public peer? The public could be used to identify what is effective "covert" and what isn't? Can the Navy make use of areas that are not on the beach?**

I can not know in full , nor I hope does anyone commenting that isn't in the Navy, but it would be honest to say, I do not know why after WWII, Korea, Vietnam, Desert Storm,

and whatever post 911 is that now we find this expansion inescapably necessary. **What are the alternatives considered?**

The Navy is already doing a very good job. And I am very grateful.

In the last year, along with a number of hot environmental issues, Sunrise Powerlink notwithstanding, I “was made aware” of the MLPA by my environment colleagues volunteering day and night to establish sustainable guidelines for our oceans. Our local coast has many impacts, not only from the Navy and tourists, but in no small way from bait fishing and other commercial endeavors. **What measures could the Navy take to help establish sustainable guidelines if they are to enter in larger capacity the current mix of impacting interest groups?** The shore birds that are often the focus of marine environmental debate and concern depend upon this zone for survival. Unfortunately because the public has taken a zesty proportion of the urban share, there are few places for the birds to nest with reliable success.

The preserve around the elephant cage happens to be one of them. The shore birds may also feed on sand crabs. **What impact does vehicle traffic have on san crabs and in turn on the shore birds that feed on them?** I think this question needs some research. I would be concerned that the traffic would reduce another food source for the birds.

I was taken back by the notion that they Navy would run through the vernal pool when it is dry. **Where do the critters go when it is dry?** It is my understanding that they are still there, just dormant. (I mentioned a paper on diapause?) Running across this area, kicking up the top soils, disturbing whatever vehicle the plants and animals and microorganisms have for staying alive suspended throughout a dry summer would be radically abused by playing and training there. **Is there someway to build a mock cover over this area to protect it? Would such a cover work?**

This vernal pool is a beach vernal pool. **Does this make it additionally rare and fragile?**

In our backcountry, our streams become corridors of algae parchment; a vehicle I propose may play a role to perpetuate the fauna that takes life when the streams are running. **Does such a vehicle exist for vernal pools? If so , and the creatures are there, buried, how will you protect them in the dry season?**

The Navy has been flying increasingly at night, and increasingly directly overhead, though since the public made considerable of it at the public forum, it may be a bit better lately. I have been nearly asleep to be awakened by the helicopters. Sometimes leaving the windows open is impossible to do. One day I came home to find that my dog had gone through, literally through, a large window out of fright from loud noises. I

confirmed with the neighbors who heard the noise and the window crash. It cost hundreds and lost me thousands in down time as I had to rebuild the wall with three double pane windows and all new trim to hold them. I really had no warning or decision as to when. Several weekends were taken through the Christmas Season to finish the project.

The Ymca is far closer than my house. I know how to extrapolate the meaning of training. Children at the Y may not. Many children that attend do so on scholarship as one of the first natural experiences or experiences at a camp they have ever had and for some ever will. The Y hosts over 10000 children every year. I know one such child, a woman now, who had difficulty learning in school. I saw many positive changes in her in the several seasons she attended this camp. She now pays her own way and holds a job with promotion and respect for several years. I think the Y played a roll in her turn around. In 1993 congressman Bilbray and Senator Boxer insured the continued existence of the Y for the next 50 years by establishing a 50 year least with the Navy. In 1998 the Navy decommissions the radar antennae, or elephant cage. I do not recall any loud noises back then. The Y Camp Surf has been in harmony with the Navy for many years prior as well.

**What can the Navy do to minimize the startling and even frightening noise around children?**

I have found on occasion, cylinders, with warnings of phosphorous. **What can the Navy do to ensure the refuse of their activities will be removed?**

I have seen whales breaching offshore during migration times. **What can the Navy do to ensure the safety and integrity of these mammals? What research and precautions can you do to protect their sonar capabilities near yours as it is vital to their survival?**

**Have you reviewed the original grant to the Navy for use at the Southern end?** I think this needs to be done. The EIS mentions a grant for the Navy when they were established there of fee simple. I have a question about this. Have you reviewed the original grant to the Navy for use just north of the Northern end of Imperial Beach. I think this needs to be done. See below an explanation from \*\*Wikipedia on line. Fee Simple can be absolute or it can be fee simple defeasible. Fee Simple defeasible can be fee simple determinable and fee simple subject to a condition subsequent. Since the Navy suspended the use of the radar tracking and because the use by the children and family camp at the Y is well understood and established I find it hard to believe that in the establishment of the Navy grant with children present and the public walking through, that the intention was that of fee simple absolute. I especially find it difficult to believe that that intention included the sounds of bombs bursting in air, so to speak.

**Have you checked to see what the stipulation was in the grant when the radar was no longer used and what was that intention? Who provided the grant? What were its conditions?** It make more logic that the Grant with an intention of mitigating the military usage of the beach originally, would included the portions used by the Y for families. I would not be surprised If the level of review were still in place to curtail an activity or in this case "frightening" noises near the camp with fee simple subject to a condition subsequent.

**What can the Navy do to reduce the noise for training? I do understand there comes a time when training has to include operating under the startle of noise. Can this portion happen somewhere else? Can the solution integrate with the public presence as much as possible?**

\* Types of fee simple [http://en.wikipedia.org/wiki/Fee\\_simple](http://en.wikipedia.org/wiki/Fee_simple)

If previous grantors of a fee simple estate do not create any conditions for subsequent grantees to own the conveyed property in fee simple title, which is commonly the case these days, then the title is called **fee simple absolute**. Other fee simple estates in real property include **fee simple defeasible** (or **fee simple determinable**) estates. A defeasible estate is created when a grantor places a condition on a fee simple estate (in the [deed](#)). Upon the happening of a specified event, the estate may become void or subject to annulment. Two types of defeasible estates are the fee simple determinable and the fee simple subject to a condition subsequent. If the grantor uses durational language in the condition such as "to A as long as the land is used for a park" then upon the happening of the specified event, the estate will automatically terminate and revert to the grantor or the grantor's estate; this is called a fee simple determinable. If the grantor uses language such as "but if alcohol is served" then the grantor or the heirs have a right of entry, but the estate does not automatically revert to the grantor; this is a fee simple subject to a condition subsequent. In the United States many of these concepts have been modified by statute in some states. Generally speaking, fee simple determinable was preferred by courts in the Common Law of the early United States. Recently, that trend has reversed, and most courts in the United States today will find a fee simple subject to condition subsequent (instead of a fee simple determinable) in situations where the conveying document's language is unclear.

Thank you for reading a long comment letter.

Thank you for defending my right to write it!

Thank you for defending our great and beautiful country!

Thank you for working together to keep it that way!

Sincerely,

Cynthia M. Buxton

541 Spruce Street

Imperial Beach, Ca. 91932





**E.1.17 Earle Callahan**

March 19, 2010

Naval Facilities Engineering Command  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I am a resident of Coronado and I live at 860 Cabrillo Ave..  
I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I agree entirely with the Navy plan. Their training is a necessity for the defense of the United States! Those that think otherwise should spend some time in/with the military, and see for themselves, and quit complaining. These Navy men/women training are willing to give their lives for their/your country, and do the local citizens' contributions and complaining match that? The Navy did provide for the least terms on the bay side and it is fenced off, which was Navy property.

Sincerely,

  
Earle Callahan

### E.1.18 Earle Callahan CDR USN (Ret)

Representing: Private Individual

Organization:

Name: Earle Callahan CDR USN (Ret)

Date: 3/13/2010 5:06:44PM

Subject: Other

Comment: If anyone complains about the necessary Navy exercises on the Strand, they really must be pacifists, and unAmerican. All they can do is complain when they are living in the greatest country of the world, and probably none of them would fight and die for their country like the men/women on the ships and beaches at these exercises. They gladly prefer others to do it, so they can complain, and enjoy their good life in the USA. The Navy has already given lots of bay front property for the protection of the least terns, and even fenced it off. As far as water pollution,ask Tijuana to quit dumping sewage into the Tijuana River. When it rains,even the old tires and garbage ends up on U.S. beaches all the way to Coronado, when it follows the north flowing eddy currents from the south.Imperial Beach surf is always contaminated with Mexico's sewage. That is worth bitching about, and not the U.S. Navy manuevers getting ready for battle!!

### E.1.19 Benton Calmes

Representing: Private Individual

Organization:

Name: Benton Calmes

Date: 3/23/2010 6:52:35PM

Subject: Noise

Comment: Add a sensitive receptor in Imperial Beach at Oneonta Elementary School. Noise extends further south than EIS indicates. Reduce helicopter overflights in general. NO helicopter overflights over residential neighborhoods. I saw no reference to this in the EIS but it happens in Imperial Beach all the time.

### E.1.20 Ted Camaisa

Representing: Private Individual

Organization:

Name: Ted Camaisa

Date: 3/13/2010 12:25:34PM

Subject: Public Health and Safety

Comment: Amphibious landing craft training poses minimal risk to the safety of residents living on Silver Strand. However, the increase in aircraft sorties in a combat training environment poses significant risk to residents in Navy Housing and the Cays. The Navy does not need another incident where an aircraft goes down on civilian housing, when realistic training could have been held in a low risk area like Camp Pendleton. Our pilots need to focus on realistic and unencumbered combat training, without concern for endangering residential homes.

### E.1.21 Joan Cameron

Representing: Private Individual

Organization:

Name: Joan Cameron

Date: 3/8/2010 7:53:32AM

Subject: Noise

Comment: The helicopters begin practice well before the time this is written. Today I heard them by 4:30AM!

### E.1.22 JIM CAVANAUGH

Representing: Private Individual

Organization:

Name: Jim Cavanaugh

Date: 3/6/2010 6:58:34PM

Subject: Military Training Activities

Comment: This is absurd... we need our military to be first in the world... stop trying to thwart them... support them.

### E.1.23 Jennifer Chapman

Representing: Private Individual

Organization:

Name: Jennifer Chapman

Date: 3/30/2010 7:31:08PM

Subject: Noise

Comment: As a resident of IB, I appreciate the military base and what it brings to the community. That said, please consider strongly any nighttime noise (2200 to 800). I don't care about daytime noise, but anything before 8am is a concern. At night I often hear helicopter noise emanating from Navy, local police, and border patrol. I also heard substantial noise that woke me up (and I sleep tight) and kept me awake when Transformers II was filmed at the Radio premises in the southern end of the Silver Strand. Since no one told the neighbors in IB, I thought that it was related to the violence in Tijuana, or something bad happening in IB. Please remember that you are not the only group and that the effect of all the noise is cumulative, and can actually be very frightening. Please avoid all noise possible from 2200 to 800 and give IB residents advance notice if you're going to have a night where you make noise anywhere approaching the noise made during the filming of Transformers. Thank you for all you do for our country.

Representing: Private Individual

Organization:

Name: Jennifer Chapman

Date: 3/30/2010 7:31:08PM

Subject: Hazardous Materials and Waste

Comment: Please be sure to inform IB residents individually and directly (by a paper notice to each abode, for instance, not just by posting something on a website no one from IB reads regularly or posting a notice in a newspaper), if there are any Hazardous Materials or Wastes relating to this proposal known now or discovered in the future.

Representing: Private Individual

Organization:

Name: Jennifer Chapman

Date: 3/30/2010 7:31:08PM

Subject: Land Use

Comment: I like to jog on the beach side of the Silver Strand with my dog. Please ensure I continue to be able to do so! Also, I noticed the new big signs on the beach north of Palm (by the surf camp). You might think it's common sense to say people have to stay below the "mean" tidal line, but it doesn't. I assume you mean average by saying "mean," but when I'm on the beach, I only know where the tide is at that moment. It changes seasonally and daily and yearly, and can also depend on whether sand rejuvenation projects (sand dumping) happen. So please clarify whether you mean that we have to stay below where the vegetation grows, or what? Also, many hispanic-only speakers come to the beach, and if I have trouble understanding what is meant, I think non-native speakers will too.

Representing: Private Individual  
Organization:  
Name: Jennifer Chapman  
Date: 3/30/2010 7:31:08PM  
Subject: Military Training Activities  
Comment: Please see my comment concerning noise.

Representing: Private Individual  
Organization:  
Name: Jennifer Chapman  
Date: 3/30/2010 7:31:08PM  
Subject: Public Health and Safety  
Comment: Please see my comment concerning Hazardous Waste.

### E.1.24 Jim Clifford

Representing: Private Individual  
Organization:  
Name: jim clifford  
Date: 3/30/2010 11:57:47PM  
Subject: Military Training Activities  
Comment: your program keeps erasing my comment entry before i even get 100 words on the screen - hope this isn't an indication of the Navy's true interest in feedback from the public. An important issue I don't see addressed anywhere relates to a major step the Navy took a few years ago the last time they sought public input re these beach areas - they Navy tried to close about 2 miles of beach between the ymca camp and the south end of the state beach. this area has for many years - if not since time immemorial - been open to the public and is one of few beach areas of significant length in san diego where beachgoers can walk or run with their dogs. what i saw happen was that the day the navy tried to close the beach, the public simply wouldn't stand for it and defied the orders of navy security staff on the beach and simply walked up and down the beach right past obstacles the navy tried to use to prevent the public from entering the beach. it is troubling that the navy used such poor judgment in even considering trying to close this beach to which the public has always had such a long and strong connection and that they navy either didn't think thru or actually was ok with putting their security staff in a hugely problematic position of trying to stop the public by what? - arresting or shooting decent taxpaying citizens who simply can't believe the navy would be so arrogant as to presume that there is any reason for the navy to abscond with 2 miles of beach which should remain as it always has - open to the public?! so my concern at this time is whether in the midst of this ridiculously long document describing the navy's latest project for this beach there may somehow be a hidden agenda of again trying to close the beach? if so i'm sure they navy has learned they will have to string claymores to pull it off this time and even then they may have to explain some severed body parts (human and canine) in the national news for awhile. i wish i could view the navy and dod as being sane enough that we wouldn't have to even imagine the navy trying to close this beach but based on what i saw just a few years ago i see we have to be ever vigilant for some wash dc dod bureaucrat to come up with another arrogant and brilliant idea of affronting the very public whose tax \$ fund everything the dod does thru out the world. so - to wit - is the navy in any way planning to curtail any public access to any of the beach between the ymca camp and the south end of the state beach (silver strand)?

E.1.25 Loris Cohen

Loris Cohen

Mr. Rowdall —

NO!

on increasing training  
along Colorado's coast line  
UNFAIR TO COLORADO  
& Really a bad idea.

Sincerely

Loris Cohen  
60 year resident  
1099 First St  
#121  
CORONADO  
619 435-5468

**E.1.26 Mark Conrad**

Representing: Private Individual

Organization:

Name: Mark Conrad

Date: 3/27/2010 3:28:19PM

Subject: Noise

Comment: The noise level of the helicopter flying up and down the bay side has increased almost every year that we have lived here over the past 10 years. Often in the summer the sound is so loud it is difficult to carry on a conversation outside. We in the Cays will now have it on both sides if this goes into effect. This is a residential community and the Navy can use camp Pendleton which has many miles of beach and without the impact of the noise to residents. This will be negative impact on all of us.

Representing: Private Individual

Organization:

Name: Mark Conrad

Date: 3/27/2010 3:28:19PM

Subject: Birds

Comment: The terns have their nest along the shore lines and you suggest in your EIS draft that it is going to have little effect on the nesting. I think the noise itself will drive the birds away. The traffic and surely destroy many of the nest.

Representing: Private Individual

Organization:

Name: Mark Conrad

Date: 3/27/2010 3:28:19PM

Subject: Fish or Fish Habitat

Comment: Grunion along this beach have been laying their eggs in great numbers. In fact at high tide and full moon the beach is crowded with many people fishing for them. The demolitions and other activities of the Navy will have negative effect of the grunion.

Representing: Private Individual

Organization:

Name: Mark Conrad

Date: 3/27/2010 3:28:19PM

Subject: Marine Plants or Animals

Comment: There are many clams along the beach and I often go out at low tide and collect the legal limit. The impact of training and traffic will have negative impact on the clams.

Representing: Private Individual

Organization:

Name: Mark Conrad

Date: 3/27/2010 3:28:19PM

Subject: Social or Economic Conditions

Comment: The noise and loss of the beach will have a negative impact upon real estate values in the area.

### E.1.27 Elizabeth Copper

Representing: Private Individual

Organization:

Name: Elizabeth Copper

Date: 3/30/2010 7:46:55PM

Subject: Birds

**Comment.** My comments are longer than 5000 characters. I did not find any indication of this limitation on the website until I attempted to submit my comments. I am emailing my comments to Mr. Randall and will also mail a copy of my comments which will be postmarked March 30, 2010 but clearly will not be received on this date as called for on the website. Given the length of the document and the complexity of the issues the limited comment space does not seem adequate. Thank you, Elizabeth Copper

### E.1.28 Elizabeth Copper

Elizabeth Copper  
Consulting Biologist  
227 F Avenue  
Coronado, CA 92118  
619 435-2687  
ecopper@san.rr.com

Naval Facilities Engineering Command, Southwest  
Attention: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

March 30, 2010

Re: Silver Strand Training Complex Draft Environmental Impact Statement

I attempted to submit my comments via the website and encountered the 5,000 character limitation. I am emailing my comments to Mr. Randall and will also mail a copy of my comments which will be postmarked March 30, 2010 but clearly will not be received on this date as called for on the website. Given the length of the document and the complexity of the issues the limited comment space does not seem adequate.

I do appreciate the opportunity to comment and as a contractor privileged to work with the endangered birds at Naval Base Coronado I applaud the Navy's many years of efforts on behalf of natural resources at their facilities at NBC. The military and particularly the Navy deserve the primary credit for increases in the population of the California least tern having pioneered the methods and set the standards that are now applied at successful sites throughout the range. Because of their outstanding efforts the Navy has been given significant regulatory relief to address the constraints imposed by the presence of such species as the least tern and the Western snowy plover. The benefits to the terns of this bargain and the significance of these efforts were clear in 2009, when NBC supported 22 percent of the least tern nesting attempts in California. NBC also supported the second largest population of nesting snowy plovers in Recovery Unit 6 and fledged as many young as sites with larger populations.

This Environmental Impact Statement (EIS) represents a lengthy effort to identify points of conflict between endangered species' management and Navy training and address potential resolution of those conflicts. However, the current status of the California Least Tern and the Western Snowy Plover neither of which is faring well, is not clearly portrayed in the EIS which may mislead the public regarding the potential consequences of the proposed actions.

Since 2001, Least Tern reproductive success in San Diego County has been declining with the steepest drops being seen at sites around San Diego Bay. This downward population trend is not addressed in the EIS. Methods for calculating population figures are under review and are

relevant to providing a clear picture of the status of the species prior to approval of increased adverse effects. In 2009, only 72 young least terns fledged from Naval Base Coronado sites from 3,232 eggs laid and 2,364 chicks hatched. The losses are in no way attributable to the Navy, which has been diligent in attempting to reduce the predation that is the primary cause of these losses but it is nonetheless in this context that increased take is being sought by the Navy. It is NBC's 22 percent of the statewide population that suffered near complete reproductive failure in 2009. Both the increasing reliance on NBC and San Diego County military facilities to support the tern population and the declining populations at these sites suggests a need for the most diligent evaluation of projects that may adversely affect these birds.

In 2009, NBC supported almost one third of the snowy plover nesting population in San Diego County. Unfortunately, while the population numbers have wavered, breeding bird survey results in 2009 showed the entire coastal population to be down by 12 percent from what was recorded in 2005 despite aggressive management efforts throughout the range. The minimum number of pairs at NBC in 2009 was only 35. In addition to problems of predation and habitat loss, in San Diego there has been a continuing occurrence of unexplained adult mortality with 15 adults found sick or dead at NBC in 2009 alone. This gloomy context needs to be clearly provided in the EIS to enable the public to evaluate the potential consequences of project approval.

The absence of the Biological Opinion (BO), the U.S. Fish and Wildlife Service's review and response to the proposed actions, from this Draft EIS fatally handicaps the ability of the public to review the consequences of the proposed actions. The discussion of the complexity of the endangered species issues, e.g., downward population trends, plover adult mortality, unresolved predator issues, variation in management approaches, lack of control of public access, and perhaps most importantly the take allowances, reasonable and prudent alternatives and terms and conditions that will be applied to minimize loss, is accessible only in the Biological Opinion. I do not believe the public can adequately evaluate the impacts of the proposed alternatives until that BO is included. The 30-day time period between circulation of the Final EIS and publication of the Record of Decision would be inadequate to review the relationship between the Biological Opinion and the proposed actions and therefore the EIS should be re-circulated as a Draft including the Biological Opinion.

Knowing how dramatically the nest numbers of the terns on the beach increased at NAB Ocean, I can understand that someone unfamiliar with plover biology might be fearful of the same kind of problem arising with the plovers. However, their nesting strategies are completely different. Neither snowy plovers nor any of their relatives nest in dense colonies anywhere in the world.

The snowy plover population in Recovery Unit 6 is unstable, has not met the Recovery Unit goals, and needs more aggressive management not less. The call for a cap on the number of plover nests to be protected is seemingly contrary to the mandate to recover this species. The justification offered for the cap suggests a misunderstanding of how plover nests are protected and does not take advantage of other opportunities to support training and minimize take. In 2.1.3.7. in the discussion of the proposed cap, protecting no more than 22 simultaneously active plover nests in SSTC-S and N combined, is identified as the only way to prevent the presence of protected plover nests from rendering the beach lanes unusable. This is apparently based on

some assumptions which are not correct or are not likely to occur. While the worst-case scenario could occur in which three plover nests would be established in a line at the crest 30m apart, this would not result in establishment of protected areas that would preclude the use of a beach lane. The size and configuration of the buffers provided for the plover nests is not to exceed 30m on a side but is often much smaller and nest marking has always been done to satisfy both the protective needs of the plovers and to accommodate training activities. The presence of 3 simultaneously active nests in the training lanes occurred twice in 2009 once in Yellow 2 and once in Red 1, the most heavily used training beaches at NAB Ocean. The calculation that 22 simultaneous nests would equal 2 nests per training lane is somewhat misleading as plover nests have historically been established in 9 of the 10 beach lanes at NAB Ocean and five of six beach lanes at NRRF (4 of them are training lanes) = ~1.67 nests per lane.

The provision of protected beach lanes has resulted in a clear concentration of plover nests in the protected lanes with 60 percent of the nests at NAB Ocean being established in those protected areas in 2009, achieving the goal of minimizing the effects of plovers on training and maximizing their nesting potential. Adding training in the protected lanes and removing the protective markers may disperse what nests are established into fully active training lanes and increase the likelihood of plover loss while decreasing the protection provided. The creation of the protected areas was a minimization measure which was successful but removal of protection should require more mitigation not lessen the existing protection with a cap. Without the Biological Opinion it is not possible to know how FWS has viewed this adverse result, what additional take would be allowed, how the allowance is justified, and what compensation is required to mitigate for the increased vulnerability.

The concern that two active nests would significantly impede training is belied by the fact that throughout the season in 2009, in many weeks, three of the training lanes at a time supported two active plover nests each. The calculation that 2 nests would obstruct 12 percent of a lane is also misleading. While 60m is approximately 12% of the length of a lane, even if the nests were lined up in a way that resulted in a 60m long line the actual acreage of the area protected by maximum buffers provided for two nests is only 0.4 acres (30mx30m square) – only 3 percent of the acreage of the smallest training lane.

The protected beach lanes offer a benefit in concentrating plover nesting and tern nesting contributing to a reduction in the number of nests in the regularly used training lanes and the potential for interference with training. Nesting density was higher in the protected beach lanes (8, 9, and 10) with a maximum of 5 simultaneous active plover nests occurring in a single lane at one time. Even with 5 simultaneous active nests protected by the maximum 30m square buffers the smallest beach lane would have no more than 8 percent of the lane lost to the protected plovers.

Even with 22 nests, simultaneously active, in beach training lanes with each given the maximum 30m square the acreage removed from training availability would be less than 4.4 acres of the 191+ acres available (128 – NAB Ocean; 63.9 – SSTCS). If all 22 simultaneously active nests were established only at NAB Ocean, using the maximum buffer they would occupy 3 percent of the training lane acreage. If the number of simultaneously active nests were doubled to 44 but the buffer was halved the area occupied between SSTCS and SSTCN would still be only 2 percent

of the beach. This is but one minimization measure that might be recommended if needed. Again, the absence of the Biological Opinion does not allow the public to evaluate the consequence of the proposed actions.

Knowing how dramatically the nest numbers of the terns on the beach at NAB increased, I can understand that someone unfamiliar with plover biology might be fearful of the same kind of problem arising with the snowy plovers. However, their nesting strategies are completely different. This is not a species that ever nests in large or dense colonies. Even the current density found at NBC is exceptional. The differences cannot be emphasized enough and the their requirements for recovery are not currently being met.

There is not adequate compensation identified for increased losses of terns and plovers that may occur as a result of heightened training tempo in what are the most concentrated nesting areas. The lack of adequate compensation is of particular concern in light of the continued reproductive failures at these sites for the last eight years.

The level of unrestricted public use of all the training areas is not accurately portrayed with the beaches at NAB Ocean being described as closed to the public so that the effect of the removal of protective markers in the southern lanes would not be significant. The beaches at NAB Ocean are used constantly by the public coming both from Coronado and from Silver Strand State Beach as well as by people from nearby military housing. The NAB beach has been identified on the Park website as a recommended walk from the adjacent State Park. Despite military presence, suspected vandalism of snowy plover nests and take of snowy plover chicks has been documented at NRRF. Vandalism of Navy property in the training lanes is also a regular occurrence. Off-leash dogs are constantly present at NRRF. The signs providing rules and identifying training areas are few, many of them have fallen down, some are covered with graffiti, and all are ignored. There is currently little to no enforcement by military personnel of restrictions on recreational activity. The ability to control public recreational activity is critical to any successful resources program regardless of the project alternative approved.

The Delta beaches which are mitigation for the loss of least tern nesting habitat at Naval Air Station North Island need to be evaluated for the presence of contaminants. The sites are subject to management constraints based on the presence of ordnance and have not been evaluated for contaminants. The presence of the former argues strongly for evaluation of the latter. Future clean-up of ordnance may affect the availability of these sites. As the Delta beaches are the fallback nesting location for terns and plovers displaced by increased training at SSTC the quality of the sites should be assured.

I applaud the efforts the Navy has expended in its management of endangered species at NBC and it is the Navy's demonstrated ability to support both training and natural resources that has set the standard for resource management for much of the country.

Sincerely,

Elizabeth Copper

## E.1.29 Shannon and William Davis

Mar. 5, 2010

Mr. Kent Randall, Dept. of Navy  
Naval Facilities Engineering Command South West – Code OPME

2730 McKean St., Bldg. 291  
San Diego, CA 92136-5198

Re: Silver Strand Training Complex Draft EIS

Training at the expense of endangered species is our concern. Endangered species are to be restored to a point that they are removed from the federal list.

We are opposed to the training activities, if you won't put protective fencing around each Endangered San Diego Fairy Shrimp's Vernal Pool habitat complex at the Navy Silver Strand Training Complex. Without fencing, foot traffic, military dogs, and vehicles may irrevocably destroy, by crushing impacts, the cysts, eggs of the San Diego Fairy Shrimp in dry season. While the EIS states it will try to avoid the vernal pools when they are wet, it clearly states that it expects there to be foot traffic in dry season.

The Navy is committed to complying with all applicable federal law, regulations and policies. Current management of vernal pools restricts all activities from the pools at all times. Environmental programs and policies have been developed to protect and improve air, water, and land, cultural resources, and national resources. The protection of natural and cultural resources has become an integral part of planning for training on S.S.T.C. However, the protected sanctuary of the vernal pools is about to change for the worse from foot traffic, other traffic, pyrotechnic chemicals, and hydrocarbon residue from overhead aircraft. Chemicals introduce poisons into the pools. Hydrocarbons cover the surface of the water and restrict oxygen from the air reaching the water in the pools. Over time, the cumulative effect leads to destroying the ecological habitat of the vernal pool.

The San Diego Fairy Shrimp ( *Branchinecta sandiegonensis* ), species code K049 101, has been designated an endangered species in 1993 by the federal Environmental Protection Act of 1973.

Why not designate 6 acres as a fairy shrimp pool complex preserve as the pools are separated on the order of meters? Currently, it looks like there are three complexes of pools at S.S.T.C.-S. In that the antenna array is no longer being used, which has a diameter of approximately 944 feet, that has an existing perimeter fence around this antenna array, which occupies an area of approximately 16 acres and could add 10 new available acres for training and set aside 6 new available acres for the fairy shrimp pool preserve. Figure 3.11-4 ( Ephemeral Pools ) shows the occupied pools have an area of 4.65 acres. Training could use the area between the pool complexes, but not through the pool complexes.

History has recorded the steady decline of the San Diego Fairy Shrimp vernal pools. These pools have existed for thousand of years. The major decline started in the 1940 to 1950 time period because of World War II. Additional decline occurred between 1979 and 1986 from urban development. Before development there was approximately 28,500 acres of vernal pool habitat in San Diego County.

Page 2

By 1986, only 7% of those acres remained. On February 3, 1997 it was reported that 70% of the remaining vernal pools were on N.A.S. Miramar or Camp Pendleton. By 1995 95% of the vernal pools were destroyed. In 2001 it was reported that 2,400 vernal pools existed. Between 2002 and 2003 only 3% of the vernal pools remain. In 2002, under President George W. Bush, a federal judge invalidated the critical habitat for the San Diego Fairy Shrimp. In 2009 President Barack Obama went to the National Environmental Protection Agency and ordered that all the protections of the endangered species that had been dismantled during the Bush era be put back which reestablished the critical habitat for the San Diego Fairy Shrimp.

So, the pools are down to 3% remaining. Most (70%) are on government property. Some of the pools do not have the San Diego Fairy Shrimp which makes the pools that do have, become more significant in importance. Development was the main cause of the decline in the pools. Now the Navy wants to develop S.S.T.C. – S which will further the decline of the pools if not protected as a fenced pool complex preserve.

We are patriotic and want our service men and women to have the best training. They deserve nothing less. Détente, the easing of strained relations, also applies to nature. A constant vigil of good stewardship needs to be kept for the endangered species to get off of the federal list. Thank you for considering our comments on this important matter.

Respectfully, Shannon and William Davis

Mail to 1185 East Lane, Imperial Beach, CA 91932-3227

### E.1.30 Ed Degenhart

Representing: Private Individual

Organization:

Name: Ed Degenhart

Date: 3/12/2010 9:48:19PM

Subject: Other

**Comment:** I live just up the street from the helicopter base in Imperial Beach and have acclimated to the touch and go operations there for the past 20 years with no incidents or harm to the environment. I have no issue with the proposed increase in training and trust the US Navy to protect our environment and community's health and safety. I also respect the will of the Naval leadership to get their people the highest and best training for their call to service by our government. Anyone who is willing to risk their lives for our country has my total commitment and support to be properly trained to perform their duty. May God Bless our Servicemen and thank you for your service to our country Sincerely, Ed Degenhart

### E.1.31 William Dick

Representing: Private Individual

Organization:

Name: William Dick

Date: 3/6/2010 10:22:18AM

Subject: Land Use

**Comment:** I have no problems with the Navy increasing the frequency of excercises on the Strand. My condominium is right above the SEAL compound and I have a direct view of activities to the south and west. I fully support all military activities on the Strand. I am never bothered by the military excercises and the Navy seems to be very responsible by minimizing noise when holding night activities. The Navy and the SEAL teams are part of my community and make living at Coronado Shores that much more exciting and enjoyable!! I love them.

### E.1.32 Bill Dimmock

Representing: Private Individual

Organization:

Name: Bill Dimmock

Date: 3/9/2010 8:35:43PM

Subject: Noise

**Comment:** Imperial Beach is a very quiet and peaceful community. We enjoy the quiet of the evenings and walks along the beach. We feel that this training facility has and will interrupt the peacefulness of our nights and our use of the beach. I understand the need for training, but feel that Imperial Beach is such a family area that training needs to be moved to a less populous area that would not limit the training times and days that are required to create the perfect military personel. There must be balance and we have lived in, although not perfect, balance with the military for over 20 years. Extended training hours and area would not only affect the harmony we have acheived it would destroy the quality of family life in Imperial Beach. Please consider the option that allows us to continue as is.

### E.1.33 Cheryl Dimmock

Representing: Private Individual

Organization:

Name: Cheryl Dimmock

Date: 3/9/2010 8:47:27PM

Subject: Other

Comment: We bought our home in Imperial Beach over 20 years ago. Although we could have moved anywhere, we chose this special area to raise our children. We felt at that time that there was no where on earth that offered all the advantages that were offered here. We knew that IB had a questionable reputation and that we would be sharing our area with a strong military presence, but these were small prices to pay to live in such a diversified area. Not only culturally, but biologically. The mornings spent on the beach, watching the seals and porpoises. The afternoons spent over by the bay observing sea birds and turtles. The times we watched the military training were all special times of great education for my children. The best scenario would be for the Navy to find another location and allow the area to go back to a natural and untouched state. We need to protect all the environment from human encroachment and no where in the state do we have such a fragile area as we have been entrusted with here in Imperial Beach. Since, I know that this possibility is just a dream, please consider the option of keeping the training and land use as you have been doing and not extending the hours and amount of use here. There are schools and children and real people who need to continue with their lives, without having to be stressed over the noise, additional traffic, diminished access to the beach and the possibility that all the wildlife that is habitating and at this point thriving, will be affected by our careless use of what is an area of such living beauty. We need to consider other options. The decision to add additional training here would diminish our quality of life and what price is the Navy willing to pay for that.

### E.1.34 William Dorr

Representing: Private Individual

Organization:

Name: William Dorr

Date: 3/9/2010 9:03:36PM

Subject: Public Health and Safety

**Comment:** My concerns deal with the new use of Training Lanes 11 through 14, currently referred to by the Navy as SSTC-South. Let's be clear, until approx. 2 years ago, the Navy did not use this section for assault / beach access training or helicopter sorties. Now it's called SSTC-South? When did that happen? This half-moon shaped piece of land is bordered on one side by the ocean. The other side is surrounded literally by YMCA Camp Surf, which is attended by over 10,000 local children annually; Westview Elementary School, Imperial Beach; Over 500 private homeowners in Imperial beach; San Diego Bay National Wildlife Refuge; Coronado Cays, a residential community of 1200 homes, Silver Strand State Beach Park used by over 1 million people a year; Loew's Coronado Hotel, which adds tremendously to the local economy and tax base and finally Camp Able, which serves Handicapped and challenged children and adults from throughout the southern CA area. SSTC-North and SSTC-South are separated on the ocean side of the strand by the CA Silver Strand State Beach Park. To have 2200 helicopter sorties and assault and beach access training, including the discharge of munitions will harm the area marked SSTC-South and have a very negative environmental impact on the surrounding community. If this is to be used for training, it should be very low impact and classroom type training. Confine the assault and sorte exercises to SSTC North, Lanes 1 to 10, where it has always been. The noise, pollutants, increased traffic and air quality will be harmed further in an area historically used for outdoor activities and wildlife sanctuary. The SSTC-South did not exist 2 years ago. That area has always been the antenna site. Nothing could have less of an impact on the area than an antenna site. To now convert it to overt and dngerous training and use the argument that the community should expect it is ridiculous. The helicopter traffic alone poses a huge potential for disaster to surrounding community sites that I just listed. The nosie is well above what is has been historically. The Navy has let helicopters fly throughout the south bay area not heeding to the restricted flight corridors or following the agreed upon protocol. The ocean corrifor is never used. To now triple the helicopter flights from 770 to 2200 a year and add the assault training at SSTC-South in the middle of residential locales, all less than 1/2 mile away is putting the public in danger unnecessarily. Continue to train in Lanes 1 to 10 and leave the antenna site, Lanes 11 to 14 for non-invasive, non-polluting activities.

### E.1.35 Douglas Dribben

Representing: Private Individual

Organization:

Name: douglas dribben

Date: 3/6/2010 1:17:22PM

Subject: Military Training Activities

**Comment:** As a frequent tourist to Coronado, I especially enjoy seeing the Seals, the helicopters, and the ships offshore in exercises. This shows me where my defense tax dollars are going, and makes me proud to be an American. I salute the men of the Seal Teams and those men and women who support them, and encourage more exercises. The exercises do not damage the environment, and sharpen our defense capabilities. Do not think for one minute that they are not under observation by those who may be on the receiving end of the exercises one day, so they act as a wonderful deterrent to those who would do America harm. Please allow the Seals to expand their exercises as they desire.

### E.1.36 Beverley Dyer

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March 6, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall-Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, Ca 92132

It was a shock on February 23<sup>rd</sup> to read in the San Diego Union of the Navy plans to increase the training along the Coronado coastline many times over the previous use. Even though I have lived in my home in Coronado Cays for over 30 years, never have we been contacted nor informed of this plan which has been studied for 10 years. Now we are allowed only two weeks to make any comment.

Since there have been no public nor individual contacts previously made with the local population during your Environmental Impact study few, if any, of the local population were aware of these drastic changes. The noise of helicopters and other aircraft, besides leaving an oily residue are already a hindrance without your increasing it three-fold. Blasts of gunfire and detonation already awaken us, create a dangerous odor. You expect that humans and all living creatures will not be affected by an increase of 10 times?

It was totally unethical and unprincipled for our government supported Navy to inhibit us from previous information. Why didn't the study include the many people who live on the Strand, the hotels, the many guests and tourists and campers who spend time in the area? Were the various organizations that sponsor beach activities informed and questioned? In which way was the human factor studied? We would like an answer.

At the poorly attended Coronado meeting at the Coronado Recreation Center on February 25 it was obvious that few people knew anything about your plans even though Environmental Impact report had begun 10 years ago.

Unfortunately, the public has only been given until March 9<sup>th</sup> to make comments concerning this issue. Is that fair?

Sincerely,

*Beverley Dyer*  
Beverley Dyer  
93 Trinidad  
Coronado, ca

**E.1.37 Marilyn G. Field**

MARILYN G. FIELD  
1101 FIRST STREET, APT. 208  
CORONADO, CA 92118  
(619) 437-6553  
mfield1@san.rr.com

March 6, 2010

Naval Facilities Engineering Command, Southwest  
ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

Mr.Randall:

I am writing with comments on the Navy's proposed expansion of training activities on the Silver Strand:

- 1) The Navy should not be increasing its operations on Coronado. Coronado is a small residential community which is already impacted by Navy traffic , noise and pollution. This has greatly increased with the nuclear aircraft carrier homeporting operations about 10 years ago. It is inappropriate to increase the burden on this small community when the Navy has other sites which might be used for training which do not burden any community - Camp Pendleton springs to mind and there are other sites as well. It may not be quite as convenient but it is unfair to ruin a small community in the name of Navy convenience, not necessity.
- 2) NEPA requires that all impacts related to a proposed course of action be analyzed in the EIS. However, the Navy has deferred analysis of the impacts from helicopter trips to and from the training areas. I believe this violates NEPA.)
- 3) Helicopter sorties will increase by about 300%. If helicopters and fixed wing aircraft take off from North Island and transit to the training sites on the Silver Strand they should be required to fly over the ocean at a sufficient distance from land so as not to disturb residents on the ocean side of Coronado. No aircraft should be permitted to fly to or from the training areas over the Bay. Residents along the Bay are already impacted by Navy helicopter noise. The Bay is so narrow that it is not possible for aircraft to fly far enough away from residences to eliminate or minimize noise.
- 4) The EIS describes the following activities: triple the helicopter sorties, new (presumably larger) helicopters and amphibious craft, pyrotechnics, pile driving, nighttime helicopter hovering for 1- 2 hours, 50% increase in training incidences, almost tenfold increase in firearm firings and admits there may be sleep disturbances and communications disruptions. Yet the EIS concludes that there will not be significant noise increase because the training is dispersed over a larger area. On this basis, no mitigation is proposed. It is not credible that these activities will not cause significant noise increases to the residents of adjacent areas. These disturbances cannot be mitigated and therefore should not be permitted.

5) The EIS notes that berms will be built in places along the Strand. This will effectively wall off the view of the ocean which residents and tourists enjoy.

6) The new and expanded training activities and the construction activities noted (including retail, recreational, housing and restaurant facilities) will increase traffic which is already greatly overburdening Coronado. There is no good solution to mitigate traffic and the Navy has been unwilling to contemplate any solutions which would significantly reduce the Navy's traffic. No activities which increase Coronado traffic should be permitted.

Respectfully submitted,



### E.1.38 Marilyn Field

**Representing:** Private Individual

**Organization:**

**Name:** marilyn field

**Date:** 3/6/2010 12:14:12AM

**Subject:** Military Training Activities

**Comment:** The Navy should not be increasing its operations on Coronado: Coronado is a small residential community which is already being severely impacted by the Navy's operations. Coronado and the Navy share this small island but the Navy's increase in operations over the past 10-15 years has created noise, increased traffic and air pollution. It is inappropriate to increase the burden on this small community - in essence ruin with further increases in noise, traffic, air pollution and adverse visual impacts when the Navy has other options for training which would not burden any community- Camp Pendleton springs to mind. It may not be as convenient but it is unfair to ruin a small community in the name of Navy convenience.

E.1.39 William S. Field



Department of the Navy  
Silver Strand Training Complex  
Draft Environmental Impact Statement

Public Hearing Comment Form

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Thank you for providing comments on the U.S. Navy's Silver Strand Training Complex Draft Environmental Impact Statement (EIS). Please provide comments no later than March 9, 2010. Comments may be submitted at the meeting, by visiting the project Web site at [www.silverstrandtrainingcomplexeis.com](http://www.silverstrandtrainingcomplexeis.com), or via U.S. Postal Service to the address below.

Helicopter noise on San Diego Bay is already a major annoyance, especially in the summer. The ramp up in training on the Silver Strand will increase hundreds of helicopter flights (up to 3x I am told) including flights from new helicopters to be stationed at North Island.

Working on the Bay in Coronado (Coronado Point) Any significant increase in helicopter traffic over the Bay will make living there intolerable. In part this is because Navy pilots fly at less than 500 feet most of the time, but even at higher elevations the noise is a nuisance.

At the meeting I was told that helicopter traffic patterns are not included in the EIS. This appears to be a violation of NEPA, which requires the total impact of any project be included in an EIS. <sup>\*\*\*Please Print\*\*\*</sup>

1. Name William S. Field

2. Address 1101 First St # 208  
Coronado, CA 92048

- 1. Please check here  if you would like to be on the mailing list.
- 2. Please check here  if you would like your name/address kept private.

Please give this form to one of the U.S. Navy representatives, place in the drop box, or mail by March 9, 2010 to:

Naval Facilities Engineering Command, Southwest  
ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

### E.1.40 Gregory Fischer

Representing: Private Individual

Organization:

Name: Gregory Fischer

Date: 3/5/2010 3:05:59PM

Subject: Noise

**Comment:** As a resident of Imperial Beach for 18 years, I have a few comments. The east view from my residence on Seacoast Drive looks down the center line of the Navy's OLF runway approximately 1/2 mile away. There are helicopters conducting flight operations on most days. The noise is not at all a problem. What I hear is the sound of freedom. I truly want these pilots and air crew to be as proficient as possible in defense of our country. As for the Silver Strand Training Complex, I want our Navy SEALs to conduct as much training as they need, no matter the noise, in the proximity of their base along the Silver Strand, recognizing their importance and vital mission for our defense. No bird, fish, ground cover or sensitive ear should have a higher priority over the vital training of our Navy SEALs. Thank you for the opportunity to comment.

### E.1.41 Vincent J. Flynn, M.D.

Mr. Kent Randall  
Silver Strand Training Complex EIS  
Naval Facilities Engineering Command Southwest  
1220 Pacific Highway  
Building 1, 5th Floor  
San Diego, CA 92132.

Dear Mr. Randall: This is in regard to the Silver Strand Training Area the navy proposes to expand. I am a native of Coronado and have watched the navy's activities all my life in and around the Silver Strand. For the most part, they have taken good care of the natural resources in the area and I have no complaints. But I must object to the increased activity in and around the old Fort Emory, the area just north of Imperial Beach. Much has changed since WWII when that area was so very important to national security. It has been repopulated with the wild species that were there 100 years ago, they have reclaimed it for their own. In my opinion, it would do much harm to the environment to reclaim this area for navy purposes. The navy should leave it alone and allow the public access to the beach area. There is still a lot of beach area available to the navy at North Island and Camp Pendleton. Give the citizens a break and do not extend your already large claim on the small area of Coronado. Sincerely, Vincent J. Flynn, MD 1021 Adella Ave. Coronado, CA 92118



E.1.42 Jeffrey G. Foster



Department of the Navy
Silver Strand Training Complex
Draft Environmental Impact Statement

Public Hearing Comment Form

Location: Imperial Beach

Date: 2/23/10

Handwritten notes: sheet for handout, FR 136, 70 14 00, Helo activities, FR 278, 70 2220

Thank you for providing comments on the U.S. Navy's Silver Strand Training Complex Draft Environmental Impact Statement (EIS). Please provide comments no later than March 9, 2010.

Comments may be submitted at the meeting, by visiting the project Web site at www.silverstrandtrainingcomplexeis.com, or via U.S. Postal Service to the address below.

The projected increase in activities could ~~effect~~ cause a noticeable difference in the peacefulness of North I.B. Please choose the No-action alternative and maintain current level of activities. I.B. residents should be considered first and foremost in making this decision as we will be the most impacted.

Beach access and the bird life along the silver strand are also coveted and are part of what make this a special place. Please leave the current situation as-is.

Choose the No-action alternative and do the extra training elsewhere where the public will not be as impacted.

\*\*\*Please Print\*\*\*

1. Name: JEFFREY G. Foster
2. Address: 474 Cherry Ave, Imperial Beach, CA 91932

- 1. Please check here [ ] if you would like to be on the mailing list.
2. Please check here [ ] if you would like your name/address kept private.

Please give this form to one of the U.S. Navy representatives, place in the drop box, or mail by March 9, 2010 to:
Naval Facilities Engineering Command, Southwest
ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS
1220 Pacific Highway, Building 1, 5th Floor
San Diego, CA 92132

### E.1.43 Frank Gaines

Representing: Private Individual

Organization:

Name: Frank Gaines

Date: 3/12/2010 10:05:59PM

Subject: Land Use

Comment: the need has long been established as has the wise stewardship of our military on the lands needed. I totally support the request and the uses identified. Frank Gaines

### E.1.44 Gerd Geissler

Representing: Private Individual

Organization:

Name: Gerd Geissler

Date: 3/30/2010 9:57:24PM

Subject: Noise

Comment: Having lived in Imperial Beach next to the Naval Antennae for over 40 years we are familiar with Naval Warfare training (which has only increased in recent years). We have not complained one bit about the noise at night (bomb blasts and machine gun fire) nor the increased helicopter traffic OVER our houses. Now you are telling us we will not only have this noise continue but it will be for longer hours and be even more disruptive to our once quiet neighborhood? The helicopter take offs and landings echo off the walls as it is and you want to do hundreds more? We are living in this community and we respect the Navy but feel that they do not respect us back. We deserve peace and quiet. The noise concerns we have are real and I don't think any of you would want to relocate your beautiful home to right across from a loud, disruptive training facility so why are you making us do that? You already take half the Strand for your training--leave us to our peaceful part down in Imperial Beach.

### E.1.45 Gerd Geissler

We are on Silver Strand and Carnation. The traffic goes directly in front of our lot. We are concerned about excessive speed and traffic backing up along Silver Strand. We would like to recommend that the northerly gate be used for access into the base. We would also recommend considering a light at Silver Strand and Palm Ave. Speed limit needs to be posted. Also concerned about noise levels after 10 pm.

### E.1.46 Lilo Geissler

Representing: Private Individual

Organization:

Name: Lilo Geissler

Date: 3/30/2010 10:06:35PM

Subject: Traffic or Transportation

Comment: We live along Silver Strand Boulevard and have had to contend with traffic going in and out of the Naval base at all hours. The people who are driving take no heed to the fact that this is a residential area and should be driven at under 25 mph. They speed out of the base at about 40-50 mph putting children and pets at risk. Now you say you want to increase training which would in turn increase the number of cars using Silver Strand Blvd. as their route? Why should we have to put up with the dangerous conditions these cars pose? Why do we have to fear an accident will occur when these hazardous drivers are speeding along our neighborhood roads? We do not want the heavy traffic congestion along our peaceful street and we do not want the added pollution associated with so many extra cars. Why not open the gate along the Silver Strand (after the berm) and make that available if you are to continue with more training exercises? Our neighborhood was not built to be a thoroughfare for large amounts of cars and we don't like the dangers they would bring.

**E.1.47 Dani S. Grady and Ralph J. Greenspan, Ph.D.**

1020 Glorietta Blvd.  
Coronado, CA 92118  
March 9, 2010

Dear Mayor Tanaka and Council,

We are writing to express our serious concern and opposition to the Navy's planned expansion of military exercises on The Strand. There are several reasons for our opposition: human health, environmental concerns, impact on residential atmosphere, and impact on the local economy.

Our family is proud of the Navy and strongly supportive and proud of our military, and we understand the need for expanded military training. The eldest son in a Coronado family with whom we are very close is currently in the Navy Seal training program, and so we have an additional personal connection with the need for the best training possible. Over the past few years, the level of military exercises in Coronado has been increasing in both frequency and intensity. It is plainly audible from our home on Glorietta Blvd. Thus, we have been patient with the expanded use of these training areas, but now feel that the noise levels we currently experience are near the tolerable limit. We feel strongly that the place to expand such operations, however, is not Coronado, but the Navy's more isolated sites at Camp Pendleton and at the offshore islands.

The noise we experience at our home, however, is not the only reason for our concern. There are many more:

Human health – One of the principal consequences of expanded war exercises on The Strand would be noise pollution, which is well documented to cause hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and harmful emotional effects. The radius affected by this noise pollution extends well beyond the area immediately adjacent to the site, given the magnitude of the noise and the efficiency with which sound travels over water, thus exposing the entire southern half of Coronado.

Another major effect would be air and water borne pollutants, toxic debris, and shoreline contamination from toxic chemicals that are carried in or produced by exploded ordinance. These include toxins and carcinogens such as depleted uranium, mercury, and lead, as well as irritants and irritant producers such as titanium tetrachloride, red and white phosphorus. This is to name just a few of the ordinance-associated chemicals known to be harmful to humans.

Loss of residential atmosphere – We have just spent several years instituting a new revision of zoning requirements based on the widespread sentiment that Coronado residents wanted to preserve their village atmosphere. Nothing will destroy that atmosphere more quickly or thoroughly than the frequent and continual sounds and smells of war exercises.

Our troops are crucial to our safety and we support them, their training, and their families. Many of them and their families also live here in Coronado. Proper support requires that we provide appropriate separation between domestic living arrangements and war simulations. This is especially relevant given the widespread occurrence of PTSD and related disorders in returning service personnel.

Ecological impact – The Navy’s own Environmental Impact Statement<sup>1</sup> acknowledges that there will be a significant impact on marine ecology, including bioaccumulation of chemicals in the food chain, death from exposure to toxic chemicals and bomb blasts. In addition to direct physical harm, there is also the impact of noise on animal life in the reduction of usable habitat, which in the case of endangered species hastens the path towards extinction. The Navy’s training use of sonar has already increased the deleterious exposure of marine mammals, and this expansion will further increase the burden of noise pollution on them.

Local Economy – The Hotel Del is Coronado’s major tourist destination, and it sits adjacent to the area where these exercises would be increased. The noise and smell from these activities would effectively ruin anyone’s stay at the hotel, or at any of the nearby hotels. The repercussions for Coronado’s standing as one of America’s most desirable tourist and vacation destinations would be rapid and detrimental, and this would be felt as a permanent blow to the local economy and tax base.

In short, we feel strongly that the proposed increase of Navy exercises on The Strand would be certain to have severe and long-term detrimental effects on the quality of life in Coronado, lasting well beyond the period of time in which the exercises actually occur. For this reason, we urge the City Council and Mayor to take a strong stand against such expansion of activities.

Sincerely,



Dani S. Grady



Ralph J. Greenspan, Ph.D.

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<sup>1</sup> [http://silverstrandtrainingcomplexeis.com/Documents/Silver\\_Strand\\_Draft\\_EIS\[1\].pdf](http://silverstrandtrainingcomplexeis.com/Documents/Silver_Strand_Draft_EIS[1].pdf)

### E.1.48 Ralph Greenspan

Representing: Private Individual

Organization:

Name: Ralph Greenspan

Date: 3/10/2010 10:19:58AM

Subject: Military Training Activities

**Comment:** My wife and I are writing to express our serious concern and opposition to the Navy's expansion of military exercises in Coronado. Our reasons include: human health, environmental concerns, impact on residential atmosphere, and impact on the local economy. Our family is proud of the Navy and strongly supportive of our military, and we understand the need for expanded military training. Over the past few years, the level of war training exercises in Coronado has been increasing in both frequency and intensity. It is plainly audible from our home on Glorietta Blvd. We have been understanding of it up to now, but the noise levels we are experiencing currently are near the tolerable limit. We feel strongly that the place to expand such operations, however, is not Coronado, but the Navy's more isolated sites. The noise at our home is not the only concern: Human health -- One of the principal consequences of expanded war exercises in Coronado is noise pollution, which is well documented to cause hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and harmful emotional effects. The radius affected by this noise pollution extends well beyond the area immediately adjacent to the site. Given the magnitude of the noise and the efficiency with which sound travels over water, this exposes the entire southern half of Coronado. Another major effect is air and water borne pollutants, toxic debris, and shoreline contamination from toxic chemicals that are carried in or produced by exploded ordinance. These include toxins and carcinogens such as depleted uranium, mercury, and lead, as well as irritants and irritant products such as titanium tetrachloride, red and white phosphorus. This is to name just a few of the associated chemicals known to be harmful to humans. Loss of residential atmosphere -- Our troops are crucial to our safety and we support them, their training, and their families. Many of them and their families also live here in Coronado. Proper support requires that we provide appropriate separation between domestic living arrangements and war simulations. This is especially relevant given the widespread occurrence of PTSD and related disorders in returning service personnel. Environmental impact -- The Navy's own EIS acknowledges that there will be a significant impact on marine ecology, including bioaccumulation of chemicals in the food chain, death from exposure to toxic chemicals and bomb blasts. In addition to direct physical harm, there is also the impact of noise on animal life in the reduction of usable habitat, which in the case of endangered species hastens the extinction process. The Navy's training use of sonar has already increased the deleterious exposure of marine mammals, and this expansion will further increase the burden of noise pollution on them. Local economy -- The Hotel Del Coronado is Coronado's major tourist destination, and it sits adjacent to the area where exercises are increasing. The noise and smell from these activities would effectively degrade anyone's experience of staying in Coronado. The repercussion for Coronado's standing as one of America's most desirable tourist and vacation destinations would be rapid and detrimental, and this would be felt as a permanent blow to the local economy and tax base. In short, we strongly feel that the proposed increase of Navy exercises in Coronado would be certain to have serious and long term detrimental effects on the quality of life in Coronado, lasting well beyond the period of time in which the exercises actually occur. For this reason, we take a strong stand against such expansion.

### E.1.49 Reiko Gregory

Representing: Private Individual

Organization:

Name: Reiko Gregory

Date: 3/30/2010 8:54:30PM

Subject: Military Training Activities

**Comment:** As a native San Diegan of over 50 years and one who has enjoyed the serenity of Silver Strand from Coronado to Imperial Beach for many years, especially as a natural habitat for many birds and other animal species, I am appalled that the Navy is requesting to expand its activities there. I call on all those in power to keep the Navy activities out of these areas. Save our natural habitat, save the Strand. We don't need more military buildup. We need to preserve our peaceful natural habitats and our beautiful environmental surroundings.

### E.1.50 Steven Gregory

Representing: Private Individual

Organization:

Name: Steven Gregory

Date: 3/30/2010 9:01:51PM

Subject: Other

**Comment:** As a San Diego resident for more than 30 years, I have enjoyed Silver Strand and the peace that it offers. Increasing military activity in this location would be harmful both from an environmental standpoint and aesthetic standpoint. Silver Strand is not only a resource for San Diego residents, but for tourists as well. And while the EIS does address the impact the increased military activities would have on terrestrial animals, the full impact is never certain, and the impact on aquatic flora and fauna is unknown and therefore a "risk" that should not be taken. I fully understand the need for training, but not at the expense of the environment and people. The military would be better served increasing moral, cultural, and ethical training, which would create a more enlightened military, rather than one that knows how to kill. I call on the people in charge to not increase military activity in this area. Our dwindling resources do not need to come under attack from our own military.

### E.1.51 Robert Hrodey

Representing: Private Individual

Organization:

Name: Robert Hrodey

Date: 3/7/2010 12:36:26PM

Subject: Other

**Comment:** Having visited the Coronado area several times over the years, we always enjoy the presence of the military and their training in the area. It reminds us of where we are, how we got there and what it takes to remain free to travel about. If the folks upset with additional training of our armed forces to allow them to better perform their duties, let THEM (the protesters) take up arms and put it on the line for us. That should settle the debate!

### E.1.52 Carol Humphrey

Carol Humphrey

Dear Mr. Randall,

As a resident of Coronado,  
I am writing to express my support  
for the Navy exercises as I am  
profoundly grateful for all the  
military does. With appreciation,  
Carol Humphrey

## E.1.53 John Hunter

DEAR UNITED STATES NAVY,

FEBRUARY 25, 2010

I WRITE BECAUSE I AM TIRED OF OTHERS  
SPEAKING FOR ME. I HAVE LIVED ABOUT 55 FEET  
FROM THE BASE SINCE THE SUMMER OF 2002.  
THE BASE HAS NEVER BEEN A PROBLEM. THE  
PROBLEMS IN THE NEIGHBORHOOD ARE NOT  
RELATED TO THE BASE. PLEASE CONTACT ME  
IF YOU WISH TO DISCUSS WHAT I FEEL  
ARE ETHICS VIOLATIONS REGARDING COMPLAINTS  
TO YOUR EXPANSION.

GO FOR IT!

THANK YOU FOR ALL YOU DO,  
JOHN HUNTER  
512 4TH ST  
IMPERIAL BEACH, CA 91932

### E.1.54 Miriam Iosupovici

Representing: Private Individual

Organization:

Name: Miriam IOSUPOVICI

Date: 3/22/2010 9:49:19PM

Subject: Social or Economic Conditions

Comment: Choosing to do this in one of the most beautiful beach environments in the US, close to major population centers that need a peaceful resource, seems a poor choice.

Representing: Private Individual

Organization:

Name: Miriam IOSUPOVICI

Date: 3/22/2010 9:49:19PM

Subject: Water Resources

Comment: We already have problems with pollution in this area. What will the effect be on the military if they contact illnesses during training? What will increased pollution effects be from training vessels?

Representing: Private Individual

Organization:

Name: Miriam IOSUPOVICI

Date: 3/22/2010 9:49:19PM

Subject: Noise

Comment: I simply don't trust that the noise levels will NOT be intolerable at the increased level proposed. I don't want to hear the echo of bombardment PERIOD. What ab the fact that we have many vets living here. Will there be increased PTSD responses to the sounds? Nothing I have read discusses this potential issue, one I am aware of as a mental health professional. Helicopter overflight noise already impacts my environment at present levels. Increases predicted will be intrusive. We have no idea what the impact will be on birds utilizing the Tijuana Estuary, part of the Pacific Flyway, despite the EIS document's assertions.

Representing: Private Individual

Organization:

Name: Miriam IOSUPOVICI

Date: 3/22/2010 9:49:19PM

Subject: Birds

Comment: The Pacific Flyway is under this area. Over 350 species of birds may be impacted, assertions to the contrary that they would not be. Imperial Beach has a difficult economic situation and visitation to this area due to bird life is one of the few income generating parts of our economy. Why would birdwatchers choose to come to an area where they are forced to watch birds with an incessant sound of helicopters, even assuming this wouldn't alter migration patterns (an assumption that strains credulity) The Silver Strand plan to increase training will inevitably negatively impact the nesting and fledgling of Least Terns due to increased foot and vehicle traffic. This Least Tern project has been successful until now. Why should we believe this EIS will be enforced after it is approved?

## E.1.55 Rina Kelley

February 24, 2010

Kent Randall  
NAVFAC Engineering Command Southwest Code: OPME  
2730 McKean St, Bldg 291  
San Diego, 92136-5198

Subj: Lack of Navy Stewardship for Public Health and Safety in Imperial Beach

Sirs;

On the occasion of the meeting this date on your proposed expansion of activities at your SSTC Complexes and associated EIR I want to take the opportunity to inform you about your lack of attention and dangerous disregard of your property in Imperial Bch which has created a dangerous condition for years.

Your misuse of the word "Stewardship" in your Eis to expand training activity in your SSTC may serve the Fairy Shrimp and Snowey Plover well, but your neglect for the welfare of the inhabitants of my City who have been subjected to your dangerous threatening activity for years is deplorable.

You are hereby put on notice that first, your steel Seawall outside of the Camp surf fence at the Beach has huge holes and serves no purpose except to attract children and has become a serious hazard to the safety and welfare of all of us. Its jagged rusted steel rim and bottom are hazardous and constitute a daily accident-waiting-to-happen for the numerous children who climb upon it both within and without the confines of Camp Surf. Since these children have little supervision anyway, you must take control and remediate this problem. This rusty steel nuisance has fallen in such disrepair that it has not served a purpose for at least ten years, and I fear for my own as well as the safety of others whenever I approach it to get down to the beach area. Would you have us wait another ten years for you to remediate and remove it. Hopefully not, now that you are formally on notice with Legal effect. Your personnel--police and others entering the camp at Antenna Station (SSTC South) often speed down Carnation avenue when your personnel should instead be using Silver Strand St in mornings which goes directly to their station. Please post signs on your side of Carnation, the North side, with warnings to slow down as numerous children and people frequent that area to the corner going to and from the Beach.

I feel like I live in a War Zone in summer when SEALS shoot guns and explode munitions within SSTC SouthEast. Could you please put a time limit on this activity so I can sleep at night and provide a schedule of upcoming events so I can leave town. Also, your planes from NASNI fly late overhead doing exercises in violation of agreements you have made with our Congressional and Civic leaders. Please don't allow this activity to continue past 9PM and afford us a timetable so I can leave town with my animals and children.

Your YMCA Camp is a nuisance, continuing to play loud music and solicit screaming and yelling well past the 9PM agreed-upon time. Please have this activity cease. (Read the Police Report on your Camp Director, Mr Thompson who assaulted my friend a Navy SEAL's wife next door when she went over to tell him to turn down the music and was 8 months pregnant and later lost her baby). I feel forced to sell my home which I must further depreciate by declaring in Real Estate papers that I live in a War Zone due to the above activity which threatens and annoys constantly in Summer months. A former Air Force Officer, I cannot begin to understand how the Navy can be allowed to perpetrate such damage on a Community when my fellow Air Force personnel would never have dared. Why don't you go to Corregador or the Phillipines where you can conduct your endless and mindless training missions. General MacArthur drove out the Japanese over there so they can't hurt you anymore- Unless you drive a Toyota. Or better still, Puerto Rico where the Air Force goes, or Haiti. In short I protest this EIS which, in the aggregate, continues to wreak more havoc on my Community. And I have no doubt that in a few years, with the proverbial Camel's Nose already in the door, you will be sending invitations to a like event.

Signed,

*Rina Kelley*  
137 Carnation Av, IB

**E.1.56 Ann S. Kennedy and General Edward Baumer**

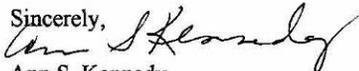
March 19, 2010

Naval Facilities Engineering Command  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I am a resident of Coronado and I live at Coronado Shores in El Mirador and overlook your facility from the 16<sup>th</sup> floor. The address is Ann Kennedy, 1820 Avenida del Mundo, #1603, Coronado, Ca 92118.

I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I hope that you can provide the level of quiet enjoyment that I have experienced for the last 8 years as I am a full time resident.

Sincerely,  
  
Ann S. Kennedy  
1820 Avenida del Mundo, 1603  
Coronado, Ca 92118

619-522-9999

*This letter is also from  
General Edward Baumer  
1820 Avenida del Mundo #1504  
Coronado, Ca 92118*

### E.1.57 C. Kennedy

**Representing:** Private Individual

**Organization:**

**Name:** C Kennedy

**Date:** 3/9/2010 3:29:42PM

**Subject:** Military Training Activities

**Comment:** I have just submitted a comment, and I am wondering if you have received it?

### E.1.58 Celeste Kennedy

**Representing:** Private Individual

**Organization:**

**Name:** Celeste Kennedy

**Date:** 3/9/2010 3:32:37PM

**Subject:** Military Training Activities

**Comment:** I have just submitted a lengthy comment, but when I pressed the ADD COMMENT button it was deleted. I gave many reasons and examples for my position in my former comment, and I am reluctant to retype it all. In general: I am opposed to the increase in Naval Training Exercises at the Silver Strand Complex Naval Training Area. We are long time residents and homeowners in Coronado and we have witnessed the increase in traffic, noise, and pollution of this gem of a town which has the U.S. Navy as its neighbor. While not all negative environmental impacts are attributable to the Navy, the fact is that many of them are, and when you combine them with the already overwhelming levels of noise, traffic, air and water pollution, it makes no sense to increase it all by ramping up Navy Training Exercises on the Strand. Helicopter flights down the bay are very noisy and bothersome. The exhaust which we can see coming out of those machines is certainly unhealthy. Increasing their activity is unacceptable. The gunfire we hear with the war games and training is a frightening and bothersome sound for civilians such as ourselves. Please do not increase the amount of gunfire we must hear. I imagine the amphibious craft are gross polluters of the sea as well. While it is admirable that the Navy has participated in the Least Tern preservation efforts, we would like to see efforts towards preservation of clean air, water, and peace and quiet as well. Coronado has grown over the years and has become densely populated with the addition of the Coronado Shores and Cays residential projects. All areas of Coronado, as well as all areas of the southern San Diego bay and coast, are affected by Naval training exercises. Please do not increase any of it, as we are already enduring way too much. Perhaps consider Camp Pendleton as a spot to increase the training exercises. It provides a vast coast and inland area which affects far fewer civilian residents. Thank You

**E.1.59 Gary Klopp**

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/29/2010 10:27:21PM

Subject: Air Quality

**Comment:** As a SBC and active duty member of NSW since 2000, I feel the need to convey some of my concerns. I do sympathize with the balancing act of training our warriors economically, efficiently, and to the standard that our country and NSW warriors require and deserve. I fully understand that our countries security is at stake; however, the amount of training and location of that training must be balanced with the surrounding communities and environment. Many studies have proven that people who live near airports have a much higher than national average of cancer due to all the exhaust and fuel that is released into the air. Under the proposed plans, helo flight hours would increase dramatically certainly affecting the air quality surrounding Imperial Beach and outlying areas. Camp Pendleton offers large training areas to include military air space, small and heavy weapon ranges, beach access for amphibious operations, ammunition storage, helo landing sites, and various supporting facilities and infrastructure. This area is much larger than the limited area on the strand and there is much more open acreage between San Diego and San Clemente. Although not as convenient to NAB Coronado or the Advanced Training Center, it is close and would meet the "balancing act" that I stated earlier. The impact at Camp Pendleton would be much less felt than here on the strand.

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:05:27AM

Subject: Noise

**Comment:** As a SBC and active duty member of NSW since 2000, I feel the need to convey some of my concerns. I do sympathize with the balancing act of training our warriors economically, efficiently, and to the standard that our country and NSW warriors require and rightfully deserve. I fully understand that our countries security is at stake; however, the amount of training and location of that training must be balanced with the surrounding communities and environment. With the proposed increase of helo operations, noise pollution would increase dramatically affecting ALL citizens of Imperial Beach, especially those like myself and our family that live close to the beach and existing training areas. If the amount of helo operations and training that you are proposing already existed, then certainly we would have no right to complain, but we bought our home and have lived here since 2002. We chose to make this our home and to retire here because we like the peacefulness and small town feel of I.B. We enjoy listening to the sound of breaking waves and wildlife, not the sound of helos. If we wanted to hear flight ops all the time, we would have bought our home by the airfield. It is currently 2010 and one plane has flown directly overhead and 3 helos have passed by while I type this. I do not believe it is fair that we should have to suffer through increased noise when other training areas exist that would meet the Navy's NSW training requirements. Camp Pendleton offers large training areas to include military air space, small and heavy weapon ranges, beach access for amphibious operations, ammunition storage, helo landing sites, and various supporting facilities and infrastructure. This area is much larger than the limited area on the strand and there is much more open acreage between San Diego and San Clemente. Although not as convenient to NAB Coronado or the Advanced Training Center, it is close and would meet the "balancing act" that I stated earlier. The impact at Camp Pendleton would be much less felt than here on the strand. My wife and I sincerely hope that you will find alternative training sites that already exist that can handle a larger capacity of training that will not be nearly as detrimental to a small beach community such as I.B. which already faces so many challenges in these tough economic times. V/R Gary and Nicole Klopp

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:05:27AM

Subject: Other

Comment: Although Imperial Beach is an extremely unique small town beach community, we continue to struggle economically for several reasons: Our proximity to the Mexican border and Tijuana, degraded water quality due to runoff and pollution from Mexico, lack of small business infrastructure, school ratings, and past stigmas are just a few of those reasons. Even with all the challenges I.B. faces, we have a lot in our favor, and every year brings more and better change albeit slowly. If you push forward with the proposed increases of training, helo operations, and live fire, you will certainly hinder this city and the people of I.B immensely. This area, and the surrounding area just can't handle the volume of increased training that you are proposing. Property value will be affected and home ownership will decrease. It will be even harder than it already is to attract new families to our town with all the noise and disruption that will certainly be experienced if your training proposals get approved. You currently aren't conducting training in front of the Hotel Del or the area between the hotel and North Island, or even the beaches on North Island, why I.B.? Because we don't hold the clout and financial means as a community that Coronado does? Other training areas already exist that would meet the Navy's NSW training requirements. Spare I.B.

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:05:27AM

Subject: Air Quality

Comment: Many studies have proven that people who live near airports have a much higher than national average of cancer due to all the exhaust and fuel that is released into the air. Under the proposed plans, helo flight hours would increase dramatically certainly affecting the air quality surrounding Imperial Beach and outlying areas.

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:20:14AM

Subject: Noise

Comment: As a SBC and active duty member of NSW since 1990, I feel the need to convey some of my concerns. I do sympathize with the balancing act of training our warriors economically, efficiently, and to the standard that our country and NSW warriors require and rightfully deserve. I fully understand that our countries security is at stake; however, the amount of training and location of that training must be balanced with the surrounding communities and environment. With the proposed increase of helo operations, noise pollution would increase dramatically affecting ALL citizens of Imperial Beach, especially those like myself and our family that live close to the beach and existing training areas. If the amount of helo operations and training that you are proposing already existed, then certainly we would have no right to complain, but we bought our home and have lived here since 2002. We chose to make this our home and to retire here because we like the peacefulness and small town feel of I.B. We enjoy listening to the sound of breaking waves and wildlife, not the sound of helos. If we wanted to hear flight ops all the time, we would have bought our home by the airfield. It is currently 2010 and one plane has flown directly overhead and 3 helos have passed by while I type this. I do not believe it is fair that we should have to suffer through increased noise when other training areas exist that would meet the Navy's NSW training requirements. Camp Pendleton offers large training areas to include military air space, small and heavy weapon ranges, beach access for amphibious operations, ammunition storage, helo landing sites, and various supporting facilities and infrastructure. This area is much larger than the limited area on the strand and there is much more open acreage between San Diego and San Clemente. Although not as convenient to NAB Coronado or the Advanced Training Center, it is close and would meet the "balancing act" that I stated earlier. The impact at Camp Pendleton would be much less felt than here on the strand. My wife and I sincerely hope that you will find alternative training sites that already exist that can handle a larger capacity of training that will not be nearly as detrimental to a small beach community such as I.B. which already faces so many challenges in these tough economic times. V/R Gary and Nicole Klopp

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:20:14AM

Subject: Air Quality

Comment: Many studies have proven that people who live near airports have a much higher than national average of cancer due to all the exhaust and fuel that is released into the air. Under the proposed plans, helo flight hours would increase dramatically certainly affecting the air quality surrounding Imperial Beach and outlying areas.

Representing: Private Individual

Organization:

Name: Gary Klopp

Date: 3/30/2010 12:20:14AM

Subject: Environmental Justice

Comment: Again, having been a member of the NSW community since 1990 and a NSW operator since 1994, I have seen a lot. Although the Navy has taken big steps in recent times to address environmental concerns, and as a nation, we have become much more aware of our environment and how our actions affect everything around us, the amount of detrimental effects on the environment along the silver strand training areas will increase drastically. Unused ammo (blanks) get dumped over the side. Food wrappers, MRE packaging, various operating items (550 chord, line, rubber bands, night sticks, etc) all get mixed into the environment. Shell casings, links for the ammunition, fuel oil from the zodiacs, exhaust from the craft and air assets, batteries, etc. Even with the best of intentions, all this is unavoidable. Men get wet, cold, hungry, tired, mentally and physically exhausted, and everything always goes wrong at the worst possible time. Believe me, I know from experience! The precious beaches that encompass and surround these training sites provide endangered habitat and wildlife refuge and the ability to recreate. These species of animals and plants struggle for survival everyday in a world that continues to build and shrink there natural habitat. The noise pollution, air pollution, water pollution, and human pollution that is simply unavoidable during the types of amphibious operations that will be conducted with alarming frequency will only continue to make the environmental concerns bigger. Along with all of these issues, is the simple fact that people live here to enjoy the beach, wildlife, and ocean. Increasing the training that you are proposing does nothing to benefit anyone or anything in I.B or the Silver Strand. Please use training areas that already exist that can better support the large volume of training that you are proposing.

**E.1.60 James M. Knox**

**Questions and Comments on the  
Silver Strand Training Complex Draft Environmental Impact Statement  
of January 2010**

This was a very long and complex report. I have tried to put my concerns and questions in the order in which they are considered in the IES. There are numerous redundancies of the many issues considered in this report, many without cross reference locations, consequently some of my questions and concerns are also redundant. I have tried to refer to the specific location in the EIS when addressing a concern or question. The questions and concerns presented here apply only to the SSTC-S.

**3.1.2.3.2 Beach Activities**

How many more activities and restrictions will take place over and above what is done now at SSTC-S?

**3.5.1.4.2 & 3.5.1.5.2 Pacific Ocean****Contaminants**

Your report states that most of the contamination of the area is caused by sewage from the river mouth and/or the South Bay Ocean outfall. Storm water runoff has a relatively minor influence on local water quality.

**Table 3.5-5**

Will increased training at SSTC-S cause more contaminants to reach the ocean by storm water runoff. Rain events occur mainly in the winter when ocean currents in the area are north to south. Were seasonal changes in ocean water movement taken into account when the findings on contaminants were formulated?

**3.5.1.5.2 Pacific Ocean**

Silver Strand State Beach does have day and overnight use numbers that were not included in this report.

I would question the conclusion that the information presented is not representative of the use of the municipal beach in Coronado. The report, in other sections, extrapolated information that was used for conclusions without complete numbers.

Navy recreational areas (Gator Beach and Fiddler's Cove) should not be included as recreational opportunities. They have restricted access and are not open to the general public.

**3.6.1.5.2 & 3.6.1.5.3**

Will LCACS be used on both Purple 1 and Purple 2?

**3.6.1.6**

The Navy should also notify residents. The sound of M16's and 50's along with concussion grenades without notice very late at night or early in the morning can lead to apprehension if a person does not know that training is taking place. Explosions and small arms fire are easily detectable from my home, and loud enough to wake me up.

**Table 3.6-5 Helicopter Pass-by Sound**

It has been my experience that the Helicopters used during training are, during many of the evolutions, closer than stated in the table.

**3.6.2.3.1 Traffic on ST-75 (local roads)**

Silver Strand Blvd in Imperial Beach leads to the main gate of the South Complex. How much will traffic increase on this residential street? How will this increase in traffic affect the acoustical environment of this residential neighborhood?

## 3.6.2.3.2

New training activities will increase helicopter use. (TRAP) (N9, Table 2-2)

Disagree with conclusion that noise level will not change. Each flight is a separate event, with individual consequences regarding sound. Weather, temperature, wind direction, and pilot skill all contribute to each event. Suggesting that the helicopters will always be in their assigned flight lanes without data is an assumption. The helicopters get out of their flight lanes many times (personal observation). Training evolutions may have variations that are not foreseen. This fact needs to be taken into consideration when making conclusions. More use equals more sound in the adjacent residential areas.

Citing the ambient sound of the surf supplies no useful data without knowing; the size of the surf, the direction of the swell, the direction and strength of the wind, and the tidal level. None of this information is contained in the table.

## 3.6.2.3.4 Amphibious Training

Increase from 10,000 to 13,800

LCAC 8 to 40 (increase of 5 times current)

I must disagree with the conclusion. While the average sound during each evolution may not increase the amount of times of discomfort will increase by a factor of 5. (40 instances verses 5 instances). Each time an LCAC lands is an individual event with individual consequences regarding sound Depending on wind conditions I can easily hear the LCACs when they are used on the purple beaches at the north end of the South complex.

## 3.6.2.3.5 Munitions

Sound generating activities will increase by 48%. How much of this 48% will be at the South complex and at what times of the day or night?

## 3.6.2.3.7 Summary Alt 1

Finding of no adverse effects. The last paragraph states the sound levels would increase during all days and hours of the week with no notice to residents. I would disagree with the conclusion of no adverse effects. Residential areas will be affected.

## 3.6.4 Table

Why were no residents of Calla or Citrus Avenues interviewed?

## Table 3.6-11 Summary of Effects

Mitigation: Please add notifies residents and local emergency personnel.

## 3.14.1.4.2 Palm Avenue &amp; 3.14.1.4.3

The description is wrong. To continue West on Palm after the four way stop at 3<sup>rd</sup> street you must be in the left hand lane. The right hand lane on Palm is right turn only. This causes large backups at times at the four way stop and also makes it very hard to turn left onto Palm from Silver Strand Blvd. Palm Avenue has been restriped for two lanes West of Third street until Seacoast Drive. Rainbow Drive is striped for two lanes. What counting devices were used and when was traffic counted by SANDAG?

## 3.14.1.4.4

The entrance to Silver Strand Blvd. from Palm Avenue has changed in the last year. It is now a sharp right hand turn to a narrow road that slowly winds left and widens. Why was no study to measure ADT done by the Navy?

#### 3.14.1.5.2 SSTC-S

The Camp Surf entrance is on the West side of Silver Strand Blvd, half a block from the entrance gate to the Training Complex.

#### 3.14.2.2.2 Ground Transportation

Last paragraph: No data on Silver Strand Blvd. to support conclusion.

#### 3.14.2.3.1

249 trip in means 249 trips out for a total of almost 500. This is a significant increase in traffic on a short residential street.

#### 3.14.3 Mitigation Measures

I would suggest opening the North Gate for groups of over three vehicles to help reduce the approximately 500 daily trips to the South Gate on such a short residential street as Silver Strand Blvd.

#### 4.2.1 Table 4-1

Why does sand need to be removed and relocated? Where is the sand that is removed being relocated?

#### 4.3.6

Sounds associated with redevelopment in Imperial Beach have nothing to do with sounds that come from training activities in the South Complex.

Thank you for considering my suggestions and questions.

James M Knox  
235 Calla Avenue  
Imperial Beach, Ca. 91932  
(619)423-8152  
[jksurf@cox.net](mailto:jksurf@cox.net)

Resident of Imperial Beach since 1951 (before it was incorporated as a city)  
Attended Imperial Beach Elementary School, Mar Vista Junior (now Middle) School  
Graduated from Mar Vista High School in 1966  
BA San Diego State University, 1970  
MA Azusa Pacific University 1979  
Retired High School Teacher (23 of 36 years teaching spent at Mar Vista High School)  
30 years experience as a Seasonal Beach Lifeguard

### E.1.61 N.J. Kuebler

Representing: Private Individual

Organization:

Name: N. J. Kuebler

Date: 3/14/2010 3:48:44PM

Subject: Traffic or Transportation

Comment: I would encourage the EIS to do a more thorough study of the traffic impact on the Silver Strand/Hwy. 75. I read the interview Delphin Lee did with KPBS in which she commented that current traffic is 1% of the throughput there. My address is a "rim" home in the Coronado Cays residential area. Weekdays, I can tell what time it is from the volume/noise of traffic, in spite of double paned windows and two useless "sound walls" along the perimeter of the complex here.

Representing: Private Individual

Organization:

Name: N. J. Kuebler

Date: 3/14/2010 3:48:44PM

Subject: Other

Comment: I believe the residents of Coronado, Imperial Beach and the Silver Strand areas could use more information published or mailed in regard to this EIS study. I ran across terms in online pages regarding the study such as "elevated causeway system", "fluid transfer system", "new platforms and equipment", and "new training". Without knowing what those are, how can we consider the impact they might have? The full pdf document would not download for me, and there are many who cannot access it at all or make it to the public meetings. I hope you will use your resources to make the information we need more available.

### E.1.62 Stephen LaPalme

Representing: Private Individual

Organization:

Name: Stephen LaPalme

Date: 3/14/2010 11:38:52AM

Subject: Military Training Activities

Comment: Your comment dropdown list should allow you to comment on several issues since many are interconnected. I am VERY MUCH AGAINST the military increasing it's activities and foot print in the silver strand area. If anything they should be considering downsizing and eventually closing the bases since they are incompatible with domestic and social harmony. Any considered activities should be relocated to the Camp Pendelton base due to it's substantial land area and distance from populated locations. Military drones and the removal of personnel from Afganistan and Iraque make this increase in activity unwarranted and unnecessary. As general and president Dwight D Eisenhaur said, "beware the military industrail complex". Increased military activities = increased military contracts= a negative draw on society and the economy. Thank you, Stephen LaPalme

**E.1.63 Barbara Lathrop**

March 25, 2010  
Barbara Lathrop  
91 Kingston Ct. W.  
Coronado, CA 92118

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall - Silver Strand Training Complex EIS  
1220 Pacific Highway, Bldg.1, 5<sup>th</sup> floor  
San Diego, CA 92132

Re: Silver Strand Training Complex EIS

Dear Mr. Randall

As an owner and resident of the Coronado Cays I would like to express my very serious concerns regarding the proposed increase of training and helicopter flights along the Silver Strand. At present helicopters are flying over the Cays although it was my understanding this was not to happen. With the proposed increase of helicopter flights by 185% this is frightening to me.

The expanded activities will disrupt the lives, well being and sleep of the residents of the Cays considerably unless the paths of travel to and from the training areas are limited to at least 1000 yds off of the ocean and into the bay on the bay side. All residents on the Silver Strand will be affected as well as beach users at the Silver Strand Beach Park, a park used by many all summer. I live halfway between the bay and the ocean and am disturbed by the current helicopters flying now and the proposed night flights and increases will cause great distress and disturbed sleeping that will affect the health and quality of life for us all. The entire Strand is a recreation area used by runners, joggers and bicycle riders and the increased training with the noise and smoke from some of this training will destroy one of the loveliest areas available for these pursuits.

I beseech you to give my requests your consideration to preserve the environment of this beautiful area.

Yours truly,

*Barbara Lathrop*

### E.1.64 Becki Lock

**Representing:** Private Individual

**Organization:**

**Name:** Becki Lock

**Date:** 3/30/2010 12:54:52PM

**Subject:** Military Training Activities

**Comment:** To Whom It May Concern, this is in response to the request to increase training activity along Silver Strand State Beach and IB. While we understand the need to train and perhaps to increase training, many of us do not feel as if the area can sustain the levels of ramped up training you are requesting. This is not a "not in my backyard" issue. This request for increased activity is just plain too much in a relatively small space. There has to be more alternatives and/or a creative way for the Navy to get the training they require (share with Pendleton?) without causing so much potential harm. Quality of life will be severely impacted. Too much noise (often late at night) will cause much disruption to the community which supports you. Beyond that, most are very concerned about the environmental impact. The stretch of beach is very narrow and the many protected species of bird are at risk. Further, the multitude of requested beach landings, more concussion type grenades, more land pollution, and more fuel polluting the water, means there is obvious potential to inflict a lot of damage to the sea life. Please know that we as a community want to continue to support the military. However, the request to increase training to the levels stated is not supported. Many won't state their objection out of fear and feelings of helplessness. So, please consider the community (as we do pay our taxes to support you) when determining what is appropriate.

E.1.65 William and Erna Lockhart



Department of the Navy  
Silver Strand Training Complex  
Draft Environmental Impact Statement

Public Hearing Comment Form

Location: IMPERIAL BEACH Date: 2-23-10

Thank you for providing comments on the U.S. Navy's Silver Strand Training Complex Draft Environmental Impact Statement (EIS). Please provide comments no later than March 9, 2010. Comments may be submitted at the meeting, by visiting the project Web site at [www.silverstrandtrainingcomplexeis.com](http://www.silverstrandtrainingcomplexeis.com), or via U.S. Postal Service to the address below.

*Please see attached comments*

\*\*\*Please Print\*\*\*

1. Name WILLIAM & ERNA LOCKHART  
2. Address 611 SILVER STRAND BLV.  
IMP. BEACH, CA 91932

- 1. Please check here  if you would like to be on the mailing list.
- 2. Please check here  if you would like your name/address kept private.

Please give this form to one of the U.S. Navy representatives, place in the drop box, or mail by March 9, 2010 to:

Naval Facilities Engineering Command, Southwest  
ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

William and Erna J. Lockhart  
 611 Silver Strand Blvd  
 Imperial Beach, CA 91932  
 619-429-4060

March 2, 2010

Naval Facilities Engineering Command, Southwest  
 ATTN: Mr. Ken Randall – Silver Strand Training Complex EIS  
 1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
 San Diego, CA 92132

Mr. Randall:

We attended the presentation in Imperial Beach, February 23. Unfortunately, we had to leave before all the comments had been heard, but we were encouraged to voice our concerns, and here are ours:

Concerns: Traffic on Silver Strand Bly. Leading into the radio station  
 Noise factor due to increase in the sorties  
 Number of exercises  
 Concern for children's safety at Camp Surf.  
 Height of platforms etc. to be built  
 Effect on Property values

We have lived in North IB for 20 years - just a few houses from the gate leading to the radio station. We are enjoying an unobstructed view from our balcony from Point Loma to Coronado to Silver Strand, unbelievable sunsets, sound of the surf – peace and tranquility, and we like it that way. Even Camp Surf took care not to disturb the views when they expanded.

We understand the need for training to stay alert. Believe us, we are all for the military- (my husband is a WWII D-Day 13 veteran with the RAF.) But having the peace in this, as yet undiscovered, quiet little town suddenly being disturbed by that huge increase in sorties (up to 2200) , firearms (from 150 to 1400) and training excercises to 5,343 – and in addition the mine-fields, vernal pools, and disruption of the life of endangered species - is a lot to ask of us.

5,343 exercises – There are 365 day a year! So how many a day, month? Time of day? And how many here at beaches white and purple..? Will the helicopters take off from and land close to North end of IB? -

Is it not possible to incorporate the training with the all the area you have now and have had for 60 years.?

Yes, it is nice for our nice young military men to be able to go home to their own beds – but what about us, the residents, who will have our nights and sleep disrupted? And the building of “platforms” - will they obstruct the view?

Children at Camp Surf - Concern for their safety with possible discharged bullet casings, mine debris? not to mention the air pollution from the helicopters.

Effect on property value, with the increased noise and disturbances. Who would want to buy (now) prized beach properties when they will be having the noise of helicopters and machine guns to contend with?

Would suggest that in addition to notifying the fire station and police station of upcoming exercises, why not place a notice in our local paper, The Imperial Beach Eagle with a date ( of course, if that is not a secret) so we will not be concerned when we hear the machine gun fires.

Last but not least, the speed of cars must be controlled on Silver Strand Blvd. There are children, not only in Camp Surf, animals, bicyclist and elderly slow walking People crossing the street. We would like to see a 25 miles zone and a speedbump On Silver Strand Blvd.

You asked for comments, - and we are giving you ours. Not that we expect to get answers to our concerns directly, but perhaps through some of the additional meetings you no doubt will be conducting some of them will be addressed. We hope so.

Thank you for your time.

Sincerely yours,

  
William and Erna Lockhart

**E.1.66 Donna MacKersie**

Representing: Private Individual

Organization:

Name: Donna MacKersie

Date: 3/18/2010 11:23:03PM

Subject: Military Training Activities

Comment: I have been a homeowner in/resident of Imperial Beach since 1993, and I am very concerned about the Navy developing the Silver Strand further for military training, killing more flora and fauna in that delicate area, and creating additional noise in Imperial Beach, which is already inundated by helicopter noise. I am aware that some people are impervious to noise, but I am not one of them. Since I've lived in I.B., I've been awakened MANY nights by loud helicopters circling my area, typically around 11-12pm, either Border Patrol or Sheriff agents, searching for illegals or whatever they're doing. Additionally, since, after 40 years as a legal secretary, I have been largely unemployed for the past year and a half and have been spending a lot of time at home during the weekdays, there is a CONSTANT roar of airplane engines that we must suffer through during the daytime hours. I understand that there is value in training near the shoreline, but is it not possible to create training locations in areas where we residents and the flora and fauna of the area will not be negatively affected? What about the vast areas in Otay Mesa -- why not train out there? I feel the same about this as I do about the idiocy of building ANOTHER stadium in downtown San Diego, which is already heavily overcrowded, traffic is impossible, etc., etc. -- why don't they build a stadium in Otay Mesa? It's close to San Diego, and there's a huge amount of space out there, and they wouldn't be wasting oceanfront space and creating additional traffic and noise problems for local residents! I cannot even imagine what the traffic would be like if they built a stadium in the National City beach area as was being considered! I-5 is a nightmare as it is during rush hours -- are these developers really that clueless, or are they only looking for increased income? The attorney promoting building the Chargers stadium says that events there won't conflict with the rush hour -- who does he think he's fooling? Please -- train elsewhere! The Olympic Training Center built in the east where there was space -- certainly the Navy can do likewise. I do not want to have to sell my home and move elsewhere because the noise has become intolerable. Donna MacKersie, 869 5th Street, Imperial Beach, CA 91932

**E.1.67 Zeke Mazur**

Since the military requires exclusive use of the beach at certain times; I would like the Union Tribune, on its weather page, to list when the beach is closed.

**E.1.68 Patricia W. McCoy**

**March 8, 2010**

Mr. Kent Randall  
Naval Facilities Engineering Command Southwest  
Code: OPME  
2730 McKean St. Bldg. 291  
San Diego, CA 92136-5198

Dear Mr. Randall:

Thank you for the opportunity to address issues of concern in the Draft Environmental Impact Statement at the Silver Strand Training Complex.

First, let me state that I do understand the U.S. Navy's need for combat training readiness to accomplish their mission in various arenas around the globe.

However, I do believe there are some items that could be changed enough to make life bearable for people in Imperial Beach, particularly those of us who reside in the northern portions of the city.

We have been good neighbors to the Navy in all the years this base has been operational. Now we are asking you for a small quid pro quo. Since some of the noise related exercises are really not mitigable we would request that you consider an earlier cessation of noise causing events, perhaps to 10:00 P.M. This seems eminently reasonable on a work night. The neighborhoods and your soldiers could be home and in bed at a reasonable hour and would conform to demands as outlined in the DEIS that military personnel not be deployed out of country to do this type of training. Many of us have to be up early for work and some of these workers are employed at North Island.

We had a dog park opened by the Navy under Captain Gianni (now Admiral) for our use but it was taken away and closed. We would ask that this facility be reopened for use when it is inadvisable to use the beach. This way neighbors can exercise their companion animals and have a pleasant place to go.

While you are not expanding the footprint of operations there is concern over the increased intensity of those exercises. The Navy has done a good job with their stewardship of the endangered California Least Tern and the Western Snowy Plover. There is concern for continued viability of these birds due to their habits of beach foraging and nesting, a behavior honed after many thousands of years of developmental evolution. These traits are not changed overnight just because we have a use for their habitat. Protection of vernal pools is essential for the survival of button celery and fairy shrimp. These species may seem unimportant and inconsequential in the scheme of things but I would emphasize that they are indicators of the state of our living environment. The environment is the underpinning of life for all living things including civilian and military alike and the mission of the Navy is to protect not only the civilian population of this country but also the land that sustains us.

As you state in the DEIS, this area is unique and as far as I am concerned it is uniquely beautiful and irreplaceable in its current form. I urge you to go the extra mile to protect the nation's endangered species and avoid a "take" of any of them.

As a former California Coastal Commissioner I have seen well meaning uses degrade and destroy entire ecosystems on which we all rely.

The comment period is all too short for a document ten years in the making. It would be greatly appreciated if the comment period could be extended at least another 45 days to accommodate those who would still like to respond to this eight hundred plus page document.

In conclusion I would like to remind you of the inconsistency of water quality due to sewage contamination particularly in the winter months. I do not like the idea of your young service people working in water whose quality leaves, at times, a lot to be desired. I would suggest you implement a water testing component into the document as part of your operations.

I noticed a deficiency in the document where there is no mention of climate change and sea level rise. I realize this is a NEPA document and it may not cover this topic. I would like to see realistic measures taken to cope with sea level rise. How do you propose to deal with these climate change issues in order to protect our investments at this site?

Thank you again for the chance to respond the SSTC DEIS

Sincerely



Patricia W. McCoy  
132 Citrus Ave.  
Imperial Beach, CA 91932  
PMCCOY@aol.com

### E.1.69 Deb McKay

Representing: Private Individual

Organization:

Name: Deb McKay

Date: 3/2/2010 3:49:48PM

Subject: Other

Comment: I find access to the draft EIS problematic. While the electronic version is available in pdf, it is an extremely large file that takes time to download. Accessibility to the document would be enhanced if it were available in smaller, downloadable files. An excellent example of this is the format used by the Southern California Range Complex EIS website whereby you can search for information by chapter or section. I can dig down to the areas that interest or affect me and not have to wade through the entire, voluminous document.

**E.1.70 M. Dan McKirnan**

Representing: Private Individual

Organization:

Name: M. Dan McKirnan

Date: 3/30/2010 12:42:56PM

Subject: Birds

**Comment:** The Recovery Plan for least terns is old and based on outdated information so there is no valid way to conclude that the additional take by alternatives 1 and 2 will not further jeopardize the species. Can the EIS provide a Species Viability Analysis that reflects current knowledge and cumulative impacts? Alternatives 1 and 2 describe the potential taking of the endangered least tern and snowy plover with the expanded military activity. I understand the law that allows incidental taking of birds during military readiness activity. What specific actions will you take in adaptive management if it is determined that excessive taking of least terns and snowy plovers is occurring? Military training in Alternatives 1 and 2 will produce significant noise impacts that could flush significant numbers of migratory birds in the Bay and along the Strand. As you referenced, this impact is more detrimental to birds naive to noise created by military activity. What adaptive management strategies will you use to study noise effects on migratory birds and make appropriate adjustments to protect birds during the migratory season? I applaud the Navy for their past efforts to protect the endangered least tern and snowy plover. However, I am not convinced that the proposed Alternatives 1 and 2 will adequately protect these species.

Representing: Private Individual

Organization:

Name: M. Dan McKirnan

Date: 3/30/2010 12:42:56PM

Subject: Environmental Justice

**Comment:** I am not convinced that the proposed increased military training activity in SSTC-S in Alternatives 1 and 2 does not raise the question of environmental justice for the City of Imperial Beach. As you indicated, this community has more poverty, 15.8% of persons living below the poverty line compared to 7.6% for the City of Coronado and 11.3% for San Diego County. Imperial Beach also has a higher % of Hispanics (43.9%) compared to Coronado (13.1%) and the County (29.9%). This community will experience more noise related to the military training activity with Alternatives 1 and 2.

Representing: Private Individual

Organization:

Name: M. Dan McKirnan

Date: 3/30/2010 12:42:56PM

Subject: Other

**Comment:** 4.3.3.1 Global Climate Change Table 4-3: Greenhouse Gas Emissions describes a doubling of emissions in tons/year with either Alternatives 1 and 2. The Secretary of the Navy has established several goals for the Navy's consumptions of fossil fuels with hybrid vehicles by 2015 and alternative energy sources including wind and solar by 2020. Alternative 1 and 2 will increase CO2 emissions by 60,554 tons/year. Why can't this EIS describe specific actions at SSTC, NASNI and NAB to offer at least 50% offsets in alternative and renewable energy for Alternatives 1 and 2?

Representing: Private Individual

Organization:

Name: M. Dan McKirman

Date: 3/30/2010 12:42:56PM

Subject: Other

Comment: 6.2 Relationship between short-term and long-term productivity. The EIS describes military activities in Alternatives 1 and 2 as long-term. Does this mean these areas will be needed for decades? What if our need for military readiness declines in 5 or 10 years and peace breaks out? What adaptive management procedures will be undertaken to restore lost habitat and species impacted by this military activity? I endorse the No Action alternative and urge the Navy to reconsider the use of the vast Camp Pendleton site for this surge period of training.

### E.1.71 Tracy McPherson

Representing: Private Individual

Organization:

Name: Tracy McPherson

Date: 3/13/2010 11:18:49AM

Subject: Military Training Activities

Comment: March 12, 2010 Ladies and Gentlemen: I simply want to say that the city Councils of Imperial Beach ( the no growth/no change/no communication council) and Coronado City Council ( the now yuppified group that has forgotten that the U.S. Navy has supported them for decades) need to get their collective heads out of the sand or wherever they are and get out of the way. You have a job to do, Train these people and help keep America America. Go Navy. I am in the flight path of the helicopters and I do hear the gunfire occasionally. I am right across S75 from the old ComCenter.. I am reminded every time I hear this or the jets from Norlrs, those are o our planes and guns, the voices I sometimes hear are American.. Thank You God I am safe today and tonight. I am a civilian, my former/late husband flew Willie Victors out of North Island. God Bless All of You, Do your Job as it needs to be done. With Aloha, Tracy McPherson

### E.1.72 Robert Miller

Representing: Private Individual

Organization:

Name: Robert Miller

Date: 3/26/2010 2:05:10PM

Subject: Land Use

Comment: Growing up in San Diego just before and during the Second World War and living in San Diego, Coronado and Imperial Beach allows for a perspective on this ribbon of sand known as the Silver Strand. I lived in the Coronado Shores for over ten years and looked out on the Strand many times each day. Being in Imperial Beach for the past fifteen years I have been up and down the Strand countless times, mostly driving, but occasionally on foot. This site is world class – sun, warmth, light, open space, mild climate, ocean breezes, ocean, beautiful beaches, harbor, blue skies, aquatic activities – you name it. Housing, lodging and recreational facilities and military activities existing alongside habitat preservation and restoration makes for a unique combination that has been developed over the decades and cannot be found anywhere else. However, walking from North Island all the way to Camp Surf in Imperial Beach it is obvious that this narrow spit of sand is past the saturation point and cannot tolerate more human activity without there being a wholesale change of character. This area is overwhelmed by traffic, military, civilian and recreational activities and plainly, to me, has passed the tipping point. Sincerely, Robert E. Miller

### E.1.73 Ronald and Nancy Mires

Representing: Private Individual

Organization:

Name: Ronald & Nancy Mires

Date: 3/30/2010 4:30:27PM

Subject: Other

Comment: While everyone should be concerned about all the items on the subject list, we also should be aware that the Navy has always been a good neighbor in Coronado and tries it's best not to disrupt people's lives or the habitat more than is absolutely necessary. Coronado is a Navy town and we should be happy and proud the Navy is so prominent in our community. Some citizens may be inconvenienced by heavy traffic for a few hours each day and there may be some impact on the beaches or the birds, but it's a small price to pay for the freedom we enjoy from having a highly trained military force. We're in two wars at the moment and there is a need to train more troops..so we all need to let the Navy get on with their hard work. I know many of our neighbors who don't feel comfortable commenting publicly share our thoughts. We're behind the Navy and it's fine training operation 100%.

### E.1.74 Roland Moritz

Representing: Private Individual

Organization:

Name: Roland Moritz

Date: 3/30/2010 7:42:00PM

Subject: Public Health and Safety

Comment: As a resident in the Coronado Cays, and a retired USNR officer previously stationed on a DDR in San Diego in 1953. My new bride and I rented in Coronado during that period and decided at that time that Coronado would be our eventual retirement location. Since 1997 we have been fortunate to be living that dream. The news of the Navy's plans to impact our paradise in such a huge way comes as a great shock and disappointment to us. We have always been happy with the thoughtful and considerate presence of the US Navy in our beautiful community of Coronado. I must point out, however, that the aircraft passing overhead on their landing approach to North Island Naval Air Station does result in noticeable pollution in the air we breathe as well as the layer of fuel and exhaust deposited on our community as the aircraft pass overhead. This, when multiplied as a result of the proposed large increase in air traffic over our area will certainly result in considerably aggravated detrimental health impact to our citizens. And, as Coronado and the Coronado Cays populations are made up of many retirees, the health impact would undoubtedly be even greater. And, of course, the added noise pollution must not be overlooked. With regard to the EIR, I would respectfully request that my concerns be received with consideration and the good Navy neighbor policy which has been appreciated over the years. Let me conclude by suggesting that a location for such a large amount of air traffic should take place in largely unpopulated areas such as the Marine Base at Camp Pendleton, and other such underpopulated areas. Sincerely, Roland Moritz

**E.1.75 Omar Nicieza**

Naval Facilities Engineering Command, Southwest.  
 Attn.: Mr. Ken Randall-  
 Silver Strand Training Complex EIS,  
 1120 Pacific Highway, Building 1, 5th. floor,  
 San Diego, CA. 92132

Dear Mr. Randall:

I live in Montego 4, at the Cays, just in front of the ocean  
 I am 80 years old and my wife is 70.  
 I worked hard for my weekly check until I was 72. My wife did the same. and now our golden years are plagued by the excessive noise of the helicopters that deprive me to sleep, and the intrusive black dust that keeps my wife obsessed with cleanliness  
 Now to crown the situation, comes your 10 years in the making draft: Lets occupy the rest of the open spaces; lets go from 700 flies to over 2,000...  
 I understand the frustrations of the Ministry of Defense with the uncertain results of the regular troops after many years of war in Irak and Afghanistan. I understand that with strategic attacks with drones and tough professional Seals, we could obtain better results...

**BUT, TO PROTECT ME YOU WANT TO MAKE MY LIFE MORE IMPOSSIBLE TO LIVE ??**

In my working life, I invented a motto that hanged in my office and showed to any big shot that disagreed with a position I took:

" LOGIC SHOULD SUPERSEDE AUTHORITY "

I wish you or your superiors could read it today and think about it...

Hopping for a positive replay,

Respectfully,



Omar Nicieza

**E.1.76 Laura Orozco**

Representing: Private Individual

Organization:

Name: Laura Orozco

Date: 3/29/2010 9:49:34PM

Subject: Traffic or Transportation

Comment: Hi I would just like to say that I would not be very happy if the increase in training would mean more "night flying" by planes and helicopters over our houses. The noise at night would not make any of the Cay's Resident's happy Thanks in advance for listening Thanks for your service and all that you do to keep us safe  
 The Orozco Family

### E.1.77 Cathy Potter

Representing: Private Individual

Organization:

Name: Cathy Potter

Date: 3/29/2010 6:37:40PM

Subject: Military Training Activities

**Comment:** Dear Sirs, We were very disappointed to read that you are planning to expand the Navy's training program in Coronado. The areas we've seen on maps for this increased activity seem way too close the the lovely Hotel Del Coronado and the residential towers south of the hotel. It seems the increased activity and noise will be detrimental to the enjoyment and safety of the beach by residents and visitors. We strongly urge you to reconsider your plan and move the training farther down the beach or use other sights such as North Island or even Camp Pendleton away from residential areas.

### E.1.78 Ann Price

Representing: Private Individual

Organization:

Name: Ann Price

Date: 3/12/2010 11:17:17PM

Subject: Military Training Activities

**Comment:** Our Military is in need of every training resource it can utilize. While I am all for protecting the environment I feel that the Navy needs to have areas to train in order to protect the American people AND the environment. We need to start thinking about human life first, then nature preserves, etc.

**E.1.79 Deirdra Price, Ph.D.**

March 19, 2010

Naval Facilities Engineering Command  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I am a resident of Coronado and have lived in Coronado Shores for 26 years.

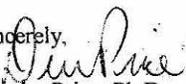
I recently learned that the Department of the Navy is planning to increase the levels of training at the Silver Strand Training Center. Our family hears the training that goes on throughout the year. It is already loud and obtrusive. We live under a flight path that has substantially raised its activities in recent years. Planes and now helicopters not only fly more often, they fly closer to our buildings at all hours of day and night. In the past, planes flew out further over the ocean instead of buzzing close to our residences.

To discover that you are proposing to increase training from 3926 annual activities to 5543, helicopter sorties from 800 to 2200, and firearm discharges from 150 to 1400, the noise will further disrupt peaceful living. Helicopter noise is grating on the nerves and you are expanding their sorties by nearly two-thirds.

I understand that we share Coronado island. The Navy has to take into account that you operate around civilians who live in Coronado. So your sensitivity to our home life is of utmost importance. The Navy has many facilities around the country. So if you choose to expand your training in a residential neighborhood, you must look out for the residents.

I hope you will come up with a solution that includes flying planes and helicopters further out over the ocean when training and landing as well as designing your training schedule and location to be as least intrusive as possible.

We hope for some semblance of peace and quiet in our home and neighborhood. You are the one to make sure this happens.

Sincerely,  
  
Deirdra Price, Ph.D.  
1710 Avenida Del Mundo  
Coronado, CA 92118

**E.1.80 Ambassador John Price**

**Ambassador John Price**

Tuesday, March 23, 2010

Naval Facilities Engineering Command  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I am writing to you today to express my concern regarding the Department of the Navy's plan to increase the levels of training at the Silver Strand Training Center. My wife, Marcia, and I purchased unit #1507 in the La Perla tower in 1990 and have spent a considerable amount of time at the Shores with our family and friends. I am deeply concerned with the increased levels of training and the impact it would have on the Coronado Shores and surrounding community.

I would appreciate the Navy's cooperation and efforts to maintain the quiet atmosphere which currently exists at the Coronado Shores.

Sincerely,

A handwritten signature in black ink that reads "John Price". The signature is written in a cursive style with a large, stylized "J" and "P".

Ambassador John Price

### E.1.81 The Sack Family

1780 Avenida del Mundo  
#404  
Coronado, CA 92118-4011  
March 20, 2010

Navy Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

Subject:

Expansion of Training Activities along the Silver Strand, Coronado

Dear Sir,

This family fully supports the expansion program which we have seen in the local newspapers and as received in a separate mailing to our home.

We have lived at the Coronado Shores with a unit facing the beach/ocean for many years and have nothing but respect and support for the training that goes on for the Navy Seals and associated military activities both in the ocean and on the strand.

We also would point out that those who bought property or otherwise decided to live in the area were fully cognizant of the presence and importance of the military training and associated activities in this area and do not feel that their complaints are justified.

Feel free to use/present this letter in any hearings or reviews that may be underway.

Respectfully,



The Sack Family

## E.1.82 Ray and Loretta Saez

March 17, 2010

Mr. & Mrs. Ray Saez  
33 St. Christopher's Ln  
Coronado Cays  
Coronado, CA. 92118

Naval Facilities Engineering Command, Southwest  
1220 Pacific Highway  
Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

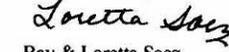
ATTN: Mr. Kent Randall – Silver Strand Training Complex EIS

Dear Naval Facilities, et al,

We have major concerns about the proposed expansion of increased training activity along the Silver Strand. Increasing the helicopter sorties from 778 per year to 2,200 is unacceptable. The helicopters make a significant noise when they pass anywhere near our home. We do not want to live under the conditions occurring around Ream Field. We looked at homes by the Tijuana Estuary in Imperial Beach before we purchased our home in March 1991. Homes in that area are significantly cheaper than the one we purchased because the helicopter noise is intolerable for most people. Our quality of life, health & financial situation would be decreased 100% if sorties were increased to the degree stated.

The endangered species living on the bay need to be protected in order to continue to exist on this earth. The Navy should respect that. Another consideration is the amount of noise firearm discharges create. We are sometimes awakened at night by that noise. It seems that the Navy wants to take over most of the area not already inhabited by animals and people. We agree that training our military is important but it should not be at the expense of the quality of life of those of us who live near by. Please consider protecting endangered species including humans by scaling back the training sites, helicopter sorties and firearm discharges. Let's create an environment in which we can live together as good neighbors.

Very truly yours,

  
  
Ray & Loretta Saez

**E.1.83 Elizabeth Schulman**

**ELIZABETH SCHULMAN**  
**15 THE POINT**  
**CORONADO, CA 92118**

March 23, 2010

NAVAL FACILITIES ENGINEERING

COMMAND, SOUTHWEST

Attn: Mr. Kent Randall

Silver Strand Training Complex EIS

1220 Pacific Highway

Bldg. 1, 5<sup>th</sup> Floor

San Diego, CA 92132

Dear Mr. Randall:

I have reviewed the EIS regarding the USN's proposal to intensify training along the Silver Strand. I excerpted the following two paragraphs as follows:

*Alternative 1, the Navy's preferred alternative, is designed to meet Navy and Department of Defense (DoD) current and near-term operational training requirements. It meets the selection criteria listed in Section 2.1.2. Under Alternative 1, the Navy would increase the tempo of training, introduce new platforms and systems into training, conduct existing routine training at additional locations within SSTC training areas, introduce new platforms and equipment, and increase access and availability to SSTC training areas. The tempo of training would be increased to meet 100 percent of Navy NTA requirements. This represents an increase from the baseline tempo of 3,926 activities to approximately 5,543 activities annually. New platforms and equipment would include replacement of Amphibious Assault Vehicles with Expeditionary Fighting Vehicles, an updated Offshore Petroleum Discharge System, and the MH-60R/Seahawk Multi-Mission helicopter.*

*SSTC is located in a populated coastal area, and its use for realistic military training is constrained by adjacent residential, commercial, recreational, cultural, and sensitive natural resource uses. As part of the Navy's commitment to sustainable use of resources and environmental stewardship, the Navy incorporates measures that are protective of the environment into all of its activities. These include employment of best management practices, standard operating procedures, adoption of conservation recommendations, and other measures that mitigate the impacts of Navy activities on the environment.*

NFEC,SW  
 March 23, 2010  
 Page Two

*Some of these measures are generally applicable and others are designed to apply to certain geographic areas during certain times of year and for specific types of Navy training. Mitigation measures covering habitats and species occurring in the SSTC have been developed through various environmental analyses conducted by the Navy for land and sea ranges and adjacent coastal waters. These mitigation measures are issued to units and commands participating in an exercise.*

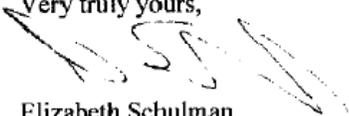
The EIS is long and detailed. Therefore, I stopped incorporating salient passages. The report itself states that the impact of alternative two is not substantially different than the impact of the first alternative.

While the law requires a lengthy and detailed EIS, common sense does not. The report's brief description of the adjoining areas says it all. The populated coastal area simply cannot support more than fifteen hundred additional sorties and deafening helicopter flights. The children (mostly military family kids) at the Strand Elementary School will be unable to concentrate on their studies and may likely suffer hearing impairment. The families in military housing will equally suffer from increased noise levels. Motorists will be increasingly distracted by the sorties on the beach leading to a possible increase in vehicle accidents.

An increase in the demise of wildlife seems to have been written off as "friendly fire." Exactly how many birds and sea life are expendable? Do we have a ratio demonstrating how many human lives will be spared as a result of increasing the intensity of training at the expense of wildlife?

Is the USN expecting to increase the number of recruits to be trained at the location? It appears the number of recruits is limited by demographics and the lack of a draft. The peninsula-type geography of the area limits the number of recruits who can be run through any program. The Navy Seal Program is reported to have a 2/3 "dropout rate." It appears the Navy Seal training program is sufficiently difficult.

Common sense dictates this expansion should not be approved.

Very truly yours,  
  
 Elizabeth Schulman

Cc: Coronado Eagle & Journal

#### E.1.84 Teresa Scott

Representing: Private Individual

Organization:

Name: teresa scott

Date: 3/17/2010 12:41:46PM

Subject: Military Training Activities

Comment: We live in the Coronado Cays and I and my family strongly support the Navy's training requirements. You folks please do what is needed to train our fine military and we the local community will do our patriotic duty to support you. Thank you for serving our country.

### E.1.85 Timothy Searfus

Representing: Private Individual

Organization:

Name: Timothy Searfus

Date: 3/12/2010 9:42:37PM

Subject: Military Training Activities

**Comment:** The requirements of properly training sailors for future missions in support of our country's strategic goals cannot be subjugated to the voices of a relatively small group of people who complain about potential negative effects on marine life, noise pollution and other potential effects of increased training but in fact this group only looks out for it's own selfish interests, i.e., their over-valued coastal properties. I lived in Coronado from 1969 until 2003. "New Money" moved into Coronado in the early 80s and since then various actors have incessantly complained about the Navy and how the Navy is inconveniently disturbing their tranquility; after all, these folks paid dearly for their homes on Ocean Blvd and Coronado Avenue and they conveniently forgot about the monument at Sunset Part at Gate 5 of North Island that says the Navy's first Navy Flying School was established around 1915 at North Island. Huh, so the Navy was there first eh? The Navy bends over backwards to maintain harmony with nature and the Snowy Plover and California Least Tern are direct benefactors of Navy determination to conserve nature. Hell, if it weren't for Camp Pendleton, the Greater Southern California Megalopolis would extend from Ventura County to Tijuana. The increased training activities and concomitant construction in support of this are critical to national security and we as a people owe a debt of gratitude to the U.S. Navy.

### E.1.86 Louis Semon

Representing: Private Individual

Organization:

Name: Louis Semon

Date: 3/13/2010 6:25:02AM

Subject: Military Training Activities

**Comment:** My wife and I welcome all activities of the military. We have been living on Coronado both in the Cays and now downtown and found no changes in our quality of life. Continue with the great mission at hand. Thank you.  
Louis and Mary Semon.

### E.1.87 Robert Shugert

Representing: Private Individual

Organization:

Name: Robert Shugert

Date: 3/2/2010 9:27:02AM

Subject: Noise

**Comment:** I live in the Coronado Cays. I served 5 years in the U.S. Air Force and 5 years in the National Guard and I strongly support our Military including the U.S. Navy, U.S. Army and Marines that will be involved in increased military training in the adjacent area to my home. I am concerned about the increased helicopter noise that will result from the sunstantial increase in "sorties" down the south bay and over my home. I have "learned to live with the present noise", but to increase it by ten times would certainly impact my life style as well as potentially lowering the value of not only my home but the 1200 homes that exists in the Coronado Cays. I hope that when training that involves helicopters will be limited to day time hours and that the flyway be either out over the ocean or down the middle of south bay. Thank you for your consideration.

### E.1.88 Marie Simovich

Representing: Private Individual

Organization:

Name: Marie Simovich

Date: 3/18/2010 2:58:17PM

Subject: Terrestrial Plants or Animals

Comment: My comments focus on vernal pools and particularly *Branchinecta sandiegonensis*. 3.11.1.4.2 Please use current references from the primary literature. This section is poorly referenced and does not reflect a current and solid understanding of the subject. Give details of the vernal pool surveys that were done in reference to *B. sandiegonensis* including number of pools surveyed, whether surveys were both wet and dry as required by the US Fish and Wildlife Service, the density of cysts in pools, the number of seasons surveyed, the number of fillings surveyed etc. 5.10 The mitigation section lacks sufficient details to evaluate. 5.10.5 Foot traffic should be severely restricted. Any path can result in altered hydrology and potential pool drainage. Population surveys should be done more frequently than every five years. Plans should include modifications for dry years. Populations should be evaluated for viability and increasing or decreasing population reproduction via both live animals and the cyst bank. Other floral and faunal elements should be monitored. The full crustacean community should be evaluated for richness and composition and this should be included in restoration, mitigation, monitoring and criteria for success plans. Efforts should focus on maintaining not only viable populating of fairy shrimp, but a vernal pool community with species diversity appropriate for the area.

### E.1.89 Kent Smith

Representing: Private Individual

Organization:

Name: Kent Smith

Date: 3/30/2010 9:54:47PM

Subject: Geology and Soils

Comment: I have reviewed many of the outlines for and against the increased use of the Silver Strand beach for training. My opinion is undecided because there are many positives and negatives to both sides of this important and relatively permanent decision. I am concerned that no mention has been made of the fact that there are underground tunnels or observation pits that were put in place 30 years ago that may still exist between the shoreline and the roadway. These should be included in any analysis of the environmental impact. As a frequent user of that beach when it more available to the public there were two occasions when I noticed military personnel observing the ocean and beach from ground locations that had to enjoy at least six feet of excavation for it to occur. It is unlikely that these structures (if they still exist) would pose a challenge to the type of wildlife in question but a total lack of mention in an environmental impact statement is not appropriate.

### E.1.90 Yvonne Stowe

Representing: Private Individual

Organization:

Name: yvonne stowe

Date: 3/26/2010 1:26:55AM

Subject: Military Training Activities

Comment: The noise from the training that is currently going on is bad enough without more! Sometimes they come so close to the top of our three story condo building it is down right scary. Please reconsider for those of us who live near by. We can't even talk on a cell phone outdoors facing the ecstasy when the copters are going up and down!

### E.1.91 Anna Stump

Representing: Private Individual

Organization:

Name: Anna Stump

Date: 3/11/2010 2:16:27AM

Subject: Public Health and Safety

**Comment:** I was driving home down the Strand late the other night when out of nowhere I heard machine gun fire, pretty close. I had my car windows closed. I was very startled. If I was not a resident of the area, I would have freaked out, maybe swerved off the road in fear. I feel there should be signs warning drivers, bikers and joggers that military exercises are happening, especially at night. I've also experienced driving through heavy smoke from military beach activities that is distracting and even cuts visibility. Thanks for your consideration.  
Anna Stump resident, Coronado Cays

### E.1.92 Rick Taylor

Representing: Private Individual

Organization:

Name: Rick Taylor

Date: 3/11/2010 1:45:29PM

Subject: Noise

**Comment:** I previously lived in a beach community when the Navy upped fighter jet training flights during the war in Vietnam at a nearby Naval air station. Complaints were many and frequent, but were silenced when the CO hung a wall banner facing the residential area which was most vocal. It read, PARDON OUR NOISE; IT IS THE SOUND OF FREEDOM. That is applicable here and now, as well as a like comment re beaches and bird sanctuaries - the Navy was here first and used these beaches unfettered long ago.

### E.1.93 Kimberly Tolles

Representing: Private Individual

Organization:

Name: Kimberly Tolles

Date: 3/29/2010 4:07:39PM

Subject: Noise

**Comment:** As a 20-year resident of Coronado and homeowner in the Coronado Cays (and currently homeowners association board member), I am extremely concerned about the Navy's training complex proposal from the point of view of increased noise, increased numbers of aircraft, more air fuel pollution than we already get, live fire next to homes and public beaches and nighttime activities. I felt the Navy's presentation before the Coronado Cays Homeowners Association Board understated the potential changes represented by this plan to the point of possibly being untruthful. I agree completely with the concerns expressed in the City of Coronado's letter and with the letter from the City of Imperial Beach. Training activities are necessary, of course, and have always been conducted in our extremely small community but to increase them to the extent proposed by the Navy amounts to reckless public endangerment.

## E.1.94 Gary Trieschman



## Department of the Navy Silver Strand Training Complex Draft Environmental Impact Statement

### Public Hearing Comment Form

Location: Imperial Beach Date: 2-23-10

Thank you for providing comments on the U.S. Navy's Silver Strand Training Complex Draft Environmental Impact Statement (EIS). Please provide comments no later than March 9, 2010. Comments may be submitted at the meeting, by visiting the project Web site at [www.silverstrandtrainingcomplexeis.com](http://www.silverstrandtrainingcomplexeis.com), or via U.S. Postal Service to the address below.

create public viewing area of  
EXERCISES (OF COURSE w/ SECURITY CLEARANCE)  
and involve public in reason for  
training

\*\*\*Please Print\*\*\*

1. Name Gary TRIESCHMAN  
2. Address 442 DASY AVE  
Imperial Beach, Ca 91932

1. Please check here  if you would like to be on the mailing list.  
2. Please check here  if you would like your name/address kept private.

Please give this form to one of the U.S. Navy representatives, place in the drop box, or mail by March 9, 2010 to:

Naval Facilities Engineering Command, Southwest  
ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

### **E.1.95 Normandie Trovato-Wilson**

There are a lot of complex factors in play when it comes to evaluating the impact this will have on endangered and threatened species. Of my particular concern is the training in the vernal pools. 90% of California's vernal pools have been destroyed due to development. I believe the Navy is committed to maintaining environmental integrity at the Silver Strand complex-however, protecting a vernal pool is not as simple as erecting a barrier around a WSP nest. There are hundreds, if not thousands, of species that coexist within vernal pools and it seems impossible to predict the effects that training in the vernal pools would have upon these species, including the endangered San Diego Fairy Shrimp. Extinction, and the loss of these sensitive habitats, is forever. Also of special concern is the fact that the California least tern is still in decline and there seems to be little explanation as to why, and there is no species recovery plan for the terns. More information needs to be gathered about the Least Terns and the Western Snowy Plovers- especially information on how the species are doing from Oceanside all the way to the border-before making a choice about the use of the 3 shipping lanes during the breeding season. There seems to be little to no mention of mitigation within the current EIS, which is also concerning. In addition, there is no mention of returning to the current state of use should Navy training levels decrease in the future. I realize the Navy is not predicting such a reduction, but there should be a stipulation that should Navy training levels decrease in the future, that the use of the land would revert to the way it is now, should the Navy end up going with Alternative #1. I compliment the Navy on their commitment to environmental stewardship. It is refreshing to see the military take such a stand for environmental integrity. It gives me hope. Ultimately, there is very little way to predict the effects that these changes would have on the WSP and the California Least Tern and until more answers are provided as to these species' progress, it seems hasty to change while these species are still making efforts to recover. A solution could be to gradually phase in these changes over the next 1-5 years and chart the progress of the endangered species. An alternative for the vernal pool training would be to conduct some training around/in a vernal pool which is in poor condition, and chart the effects (weeds, etc) of foot traffic around the vernal pools. This would also provide the Navy with time to figure out mitigation measures for the use of the vernal pools and test solutions for the inevitable problems and imbalances in the ecosystem which will result once foot traffic is allowed in the vernal pools. Thank you for reading my statement.

## E.1.96 Joan Van Der Hoeven

RE:

3-15-2010

SILVER STRAND TRAINING COMPLEX EIS  
I WOULD LIKE TO SUPPORT PROPOSED  
NAVAL TRAINING ENHANCEMENTS  
ALONG THE SILVER STRAND COASTLINE  
OF SAN DIEGO. FAR TOO MANY OF  
OUR NATIONS TRAINING RESOURCES  
ARE COMPROMISED BECAUSE OF PUBLIC  
STUPIDITY IN PURCHASING RESIDENTIAL  
PROPERTIES IN AREAS DESIGNATED FOR  
MILITARY USE. WHEN OUR COUNTRY IS  
AT WAR IT IS NECESSARY FOR OUR  
TROOPS TO TRAIN AS MUCH AS  
POSSIBLE FOR SAFETY'S SAKE. WAR  
DOES NOT RUN FROM 8-5, AND THERE  
ARE OBVIOUS REASONS WHY TRAINING  
AT NIGHT OR ON WEEKENDS IS  
REQUIRED. THE NAVY HAS OBSERVED  
HIGH STANDARDS OF HAZARDOUS MATERIALS  
MANAGEMENT. BEACH ACCESS IS AVAILABLE  
TO THE PUBLIC IN NUMEROUS ALTERNATIVE  
AREAS - OUR COASTAL COMMISSION ASSURES  
THIS. THE ADDITIONAL TRAFFIC & NOISE  
ASSOCIATED WITH NAVY TRAINING FOR  
A NATION AT WAR SHOULD BE REGARDED  
AS AN ACCEPTABLE CONSEQUENCE FOR  
PROVIDING TRAINING THAT COULD SAVE LIVES.

Joan Van Der Hoeven  
AICP

Joan Van Der Hoeven  
2330 1st Ave. Unit 406  
San Diego, CA 92101 \*

**E.1.97 Susan and Monte Weddle**

Naval Facilities Engineering Command,  
Southwest  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1  
5<sup>th</sup> Floor  
San Diego, CA 92132

Susan & Monte Weddle  
3848 Coronado Ave.  
San Diego, CA 92107

Dear Sirs:

We are responding to the article in the Union Tribune concerning the possible increase in the number of sorties being proposed by the navy. We sincerely hope that you will listen to our concerns.

We live in Point Loma and have been greatly concerned over the increase in helicopter and fighter jet noise. The possibility of vastly increasing the number of sorties is unacceptable to us.

We recognize the necessity for properly trained troops and we certainly appreciate what our troops do for us. But before you increase the level of noise and vibration in our neighborhood we would like some facts. You stated in the article that the recent number of sorties has been at 700+ in the past year. How many sorties were practiced in 2008 and 2007? Our guess and fear is that the number of sorties has been increasing continually over recent years.

We certainly agree that naval troops must be properly trained, but we also want the navy to continue to be good neighbors with our community. To that end, we oppose any increase in the number of sorties in Imperial Beach, Coronado, and Point Loma.

Thank you for listening. We look forward to hearing from you.

Sincerely,



Susan J. and Monte R. Weddle

### E.1.98 Dewey Wells

Representing: Private Individual

Organization:

Name: Dewey Wells

Date: 3/6/2010 12:02:19PM

Subject: Military Training Activities

**Comment:** My wife and I have visited your area and think the strand is very nice. However, we really think military needs (as in SEAL training) must come first. We would love for our SEALs to use the strand as much as they need to for training. Keep in mind that the military is the only reason we enjoy the freedoms we do.

### E.1.99 Richard Willson

Representing: Private Individual

Organization:

Name: Richard Willson

Date: 3/29/2010 10:16:45PM

Subject: Military Training Activities

**Comment:** I support the Navy's expanded use of their Coronado training facilities. We must all make contributions to protect our country. Accepting some inconvenience is a reasonable contribution for the civilians of Coronado to make in support of the Navy's role in defending our county and its interests.

**E.1.100 Karen S. Wright**

KAREN S. WRIGHT

154 Calla Ave  
Imperial Beach, Ca 91932Naval Engineering Command Southwest  
Attn: Mr. Kent Randall  
Silver Strand Training Complex EIS  
1220 Pacific Highway  
Building 1, 5<sup>th</sup> Floor  
San Diego, Ca 92132

Dear Mr. Randall:

I have lived at 154 Calla Ave Imperial Beach since 1962. I have invested a lot to improve my home. My bedroom windows overlook the Silver Strand Training Center. In all those years I have enjoyed the view and the quiet. Occasionally the navy would use the beach for landing boats and men or for running on the beach. But until the last year or so, I haven't heard gunfire, explosions, or frequent helicopters.

Now I understand the navy intends to increase the intrusive noise events. Intrusive noise events will destroy the peace of our neighborhood. Please reconsider and move the noisy training to Camp Pendleton where there is no peaceful neighborhood to destroy.

Sincerely,  
  
Karen S. Wright

**E.1.101 Susan Yamagata**

**Representing:** Private Individual

**Organization:**

**Name:** Susan Yamagata

**Date:** 2/8/2010 8:07:19PM

**Subject:** Traffic or Transportation

**Comment:** Comments on Silver Strand Training Complex I live right next to the entrance of the Training Complex. One problem that only happens when it rains is the storm drain (It makes a 90 degree turn just to the east of the guard bldg.) and it gets plugged up and is insufficient to handle the water flow. It backs up, floods and makes a small pond then runs over your entrance road. But, the main problem these past number of years is the speed / traffic when vehicles enter or depart the base gates. I have spoken with many of my neighbors and we have contacted the city of Imperial Beach. They have used a mobil speed detector machine on occasion. But, we would like you to consider more permanent and enforceable options. A few suggestions are: 1) There is a Stop sign when exiting the base, but no one uses it. There is a speed bump when exiting the base, but anyone driving fast out of there just bottoms out a bit and continues on at a fast speed. If you would require all exiting traffic to stop at the stop sign, then cars would not be at such a high speed as they leave the base. 2) Neighbors have suggested installing a Stop sign at Silver Strand Blvd. and Carnation Ave. 3) Neighbors have suggested installing at least two speed bumps, maybe three along Silver Strand Blvd. 4) Install 25 mph speed signs. 5) Install a Pedestrian crossing that requires drivers to stop. Drivers race down the street, because they like to drive fast, they are late, or they are trying to beat the automatic gate when they see someone ahead of them already has the gate open. And this is specifically for my situation. I drive a small car and when I back out of my driveway, I cannot see down the street when there are cars parked in front of my neighbors. (There are usually vans, suvs, or large trucks.) If I am lucky I can see a little 2 foot opening between the vehicles and I sit and watch that opening to see if anything passes in front of it. But, lately there haven't even been any of those openings. In addition, I have to look towards the inside of the base to see if any vehicles are driving down the road to exit, because I know they will not stop at the stop sign. Then there is the driveway for Camp Surf right across the street, (they should put up stop sign also), because during their busy season their guests just pull out without looking to see if anyone is exiting the navy base. So, I am trying to monitor three different directions without having a clear view. Sometimes, the only thing I can do is look at the guard to see if he is looking down the street or getting up, because, then I know a vehicle is coming from at least one direction. 6) I was wondering if you could install a convex mirror outside of the base that shows oncoming traffic on Silver Strand Blvd. that I would be able to use. I know this is not really your concern, but I am afraid with increased traffic due to your plans, the odds of me making it out of my driveway without getting hit are getting worse for me. Thank you for considering my comments on your future plans.

## E.1.102 Susan Yamagata

**Representing:** Private Individual

**Organization:**

**Name:** susan yamagata

**Date:** 2/24/2010 1:10:10PM

**Subject:** Traffic or Transportation

**Comment:** I attended the Public Hearings Open House in Imperial Beach. Thank you for providing this opportunity for one-on-one discussions with representatives who could offer clarification on various topics. I spent most of my time at the Community Interests desk talking about traffic safety on Silver Strand Blvd. leading up to the entrance of the complex. They suggested that I write additional comments or suggestions. First off one of the representatives mentioned that they were uninformed about the complaints that many neighborhood residents have voiced about the speeding drag racing and problems pulling out of driveways or side streets when on-street parking blocks a clear view of oncoming traffic. Some of these problems were brought to the attention of Imperial Beach traffic control. In the past (though not for a number of years) an electronic traffic monitoring machine was placed on our street to remind drivers to slow down. I know of one time when a traffic ticket was issued but heard that it was thrown out of court as "entrapment". As part of your review, I'm guessing that you've asked the city of Imperial Beach to share any information gathered over the past seven years. I was also told that there are "warrants" that a situation must meet in order to be able to install anything from a speed limit sign to a stop sign to any other traffic control measure. Examples given were things like numbers of tickets issued, numbers of accidents, numbers of complaints, numbers of deaths. But the problem with those limitations is that after a flurry of complaints by neighbors especially about the speeding problem, nothing lasting was done to address this ongoing situation and it seemed pointless to email or call or leave another message with the City and no messages were ever responded to after calling and leaving a message at the phone number listed on the sign at the Training Complex entrance. Another problem that comes up is who has jurisdiction over street safety issues. I believe the west side of the street at Camp Surf might belong to Coronado and the rest of the street is the responsibility of Imperial Beach. It would benefit the neighborhood if all three parties including the Navy would join together to try and address residents' concerns. I have a feeling that many people who have complained about the traffic in the past have not taken part in this "Comment" opportunity. It would serve community relations if additional outreach was attempted. I suggest that you ask the city of Imperial Beach to set up the electronic message board on Silver Strand Blvd. closer to Palm Avenue so that the people coming out of the other side streets will see it. If you flashed a message: "Traffic safety issues? Please comment here or visit [www.silverstrandtrainingcomplexeis.com](http://www.silverstrandtrainingcomplexeis.com)." And then provide a drop box and blank comment forms right next to the sign. I have seen parents with young children crossing Silver Strand Blvd. on there way to the school just around the corner. They do not always go down to the corner crosswalk, because there is a little parkway next to the El Tapatio Restaurant that is a shortcut. In my previous comments I submitted I listed "pedestrian crosswalks" (maybe like the kind with signs that are on Seacoast Drive?) Another traffic issue is pulling out onto Palm Ave. from Silver Strand Blvd. It seems that there were more street parking spots added on Palm which can cut down on visibility to see oncoming traffic. There are stop signs at 3rd and to the west on Palm Ave. at the corner of the 2nd. With planned increase in traffic for the Complex it would help if you would consider a traffic light or a three-way stop at the corner of Palm and Silver Strand Blvd. If all else fails and Silver Strand Blvd. does not meet the "warrants" to take any traffic control actions, I suggest that the Navy consider using temporary signs. In the past I have spoken to some of the trainers who work at the complex. They told me that every time a new group comes in to start training, they give a speech about speeding and other traffic do's and don'ts when traveling through this neighborhood, but that the majority of participants are young and full of fire and will on occasion disregard these warnings. Maybe at the beginning of each training period a set of temporary signs could be used on the exiting side of the street. Example: First and foremost an enforced "STOP" sign before exiting the base. Then a "25 mph" speed limit sign. Then a friendly reminder that you are driving through a "Neighborhood". I have run out of room on this form and will finish my comments on another form.

**Comment:** continuing my comments from previous comment form ID # 8-550-1 ... But, the problem with this is it doesn't address cars coming into the base or problems with visibility for residents to pull out of side streets or their driveways when you're not sure how fast a car might be coming down the road. Also, if the warrants are not met for street signs etc. then maybe the Navy could install signs like those listed above on their property before the exit gate, then you wouldn't have to meet the warrants? My last suggestion is that you check the schedule for planned complex activities, then come down and sit in your car on our street and see for yourself. The street is not always busy, but traffic is heaviest in the a.m. as trainers and participants are arriving or later when leaving after a training exercise. This visit would not take into consideration the after hours traffic throughout the night or over the weekends. Thank you in advance for at least considering these issues and concerns. I'm hoping that this time some discernible action will be taken to alleviate some of the unsafe traffic situations.

## **E.2 COMMENTS FROM ORGANIZATIONS**

The comments in this section were received in written form by organizations, agencies, tribes and individuals

## E.2.1 Airport Trust

LEON E. CAMPBELL  
ATTORNEY AT LAW  
7825 FAY AVENUE, SUITE 200  
LA JOLLA, CALIFORNIA 92037  
TELEPHONE (858) 459-4064  
FAX (858) 454-8636  
puente1888@aol.com

February 24, 2010

Naval Facilities Engineering Command  
Southwest  
Attn: Mr. Kent Randall-Silver Strand  
Training Complex EIS  
1220 Pacific Hwy, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall:

I represent Donald W. Rogers, Trustee of the Airport Trust, a private trust which has the proprietary interest in an exclusive license under Patent No. US 7,469,859 B1. The patent was issued on December 30, 2008 and describes an airport design having three 12,000 foot runways, a 2,000 acre footprint, two levels surrounded by water, access to the shore by underwater tubes and located in South San Diego Bay.

Enclosed are (1) Aerial photograph of the bay with the airport superimposed; (2) Description of Proposed Airport dated February, 2010; and (3) Copy of patent.

The site of the airport has been carefully selected to avoid interference with marine traffic, habitats, other air traffic and is outside the amphibious base security zone.

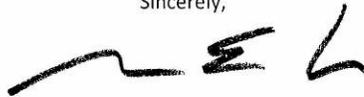
The trustee welcomes the expanded use of the Silver Strand provided it does not conflict with the proposed airport. At this time no conflict is apparent except amphibious operations within the bay which would involve water area within the boundaries of the airport.

The proposed airport includes a second entrance to the bay, as shown in the photograph. The advantages are discussed in the description. Such advantages include its use for military vessels. The second entrance is not essential for the proposed airport, but would have beneficial effect to the area, including environmental benefits.

Over 50 years have been spent and recently over \$17 million in a futile effort to find an alternate airport site to Lindbergh Field which will reach its capacity circa 2020 with no room to expand with any additional runways. The proposed airport is the *only* feasible solution.

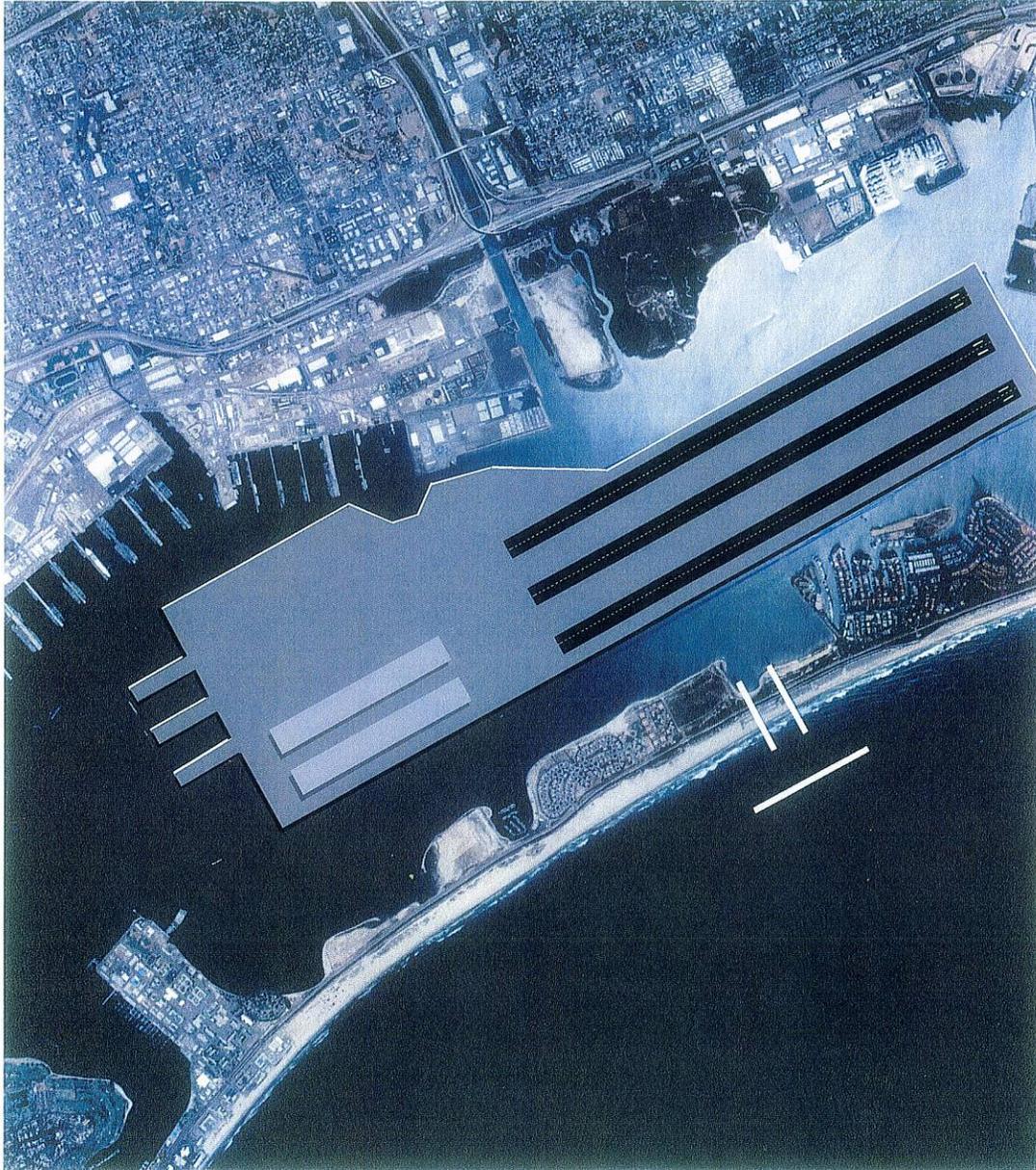
It is requested that any expanded use be consistent with the proposed airport.

Sincerely,



LEON E. CAMPBELL

# Proposed New San Diego Airport Footprint



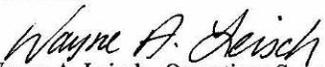
## E.2.2 California American Water



Mr. Kent Randall  
Naval Facilities Engineering, Southwest  
Silver Strand Training Complex, EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Dear Mr. Randall,

I recently read in the San Diego Union-Tribune, the Monday, February 22<sup>nd</sup> edition, that the Navy is utilizing a larger amount of the property on the Silver Strand Training Complex and will be having a larger footprint of operations at that site. I would like to remind those of you responsible for this property that California American Water Company has a 16" cast iron water main that traverses the base from the south end to the north end of it. This main provides a connection between Imperial Beach and Coronado, feeding the Coronado Cays along with the Navy Base. This main was installed in 1912 and has been in continuous service since then. I would make you aware of this critical main so that you always take into consideration the location of the main when you make plans to install new infrastructure on the base. Last year at the very north end of the base there was some sort of large poly-ethylene pipeline bored from the road to the Pacific ocean. It was bored in very near proximity to our 16" main and I believe we all dodged a bullet when that main was not damaged. Also, there are a number of vehicles parked in the same area near the fence along Hwy 75 on a day to day basis that are adjacent to two air/vacuum valves we have on the 16" main. I would hope that the vehicles never hit one of those valves and knock them off as it would create a bit of damage and cause us to shut down the 16" main which would put the base out of water and create a low pressure issue in the Coronado Cays. Thank you for your consideration with regards to my comments.

  
Wayne A. Leisch, Operations Supervisor  
(P) 619.435.7504 (C) 619.571.5279

## E.2.3 California Coastal Commission

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, GOVERNOR

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

March 18, 2010

Kent Randall  
Silver Strand Training Complex EIS Project Manager  
1220 Pacific Highway  
Building 1, 5th Floor  
San Diego, CA 92132

Re: Coastal Commission Staff Comments, U.S. Navy Draft EIS for the Silver Strand Training Complex (STCC)

Dear Mr. Randall:

Thank you for the opportunity to comment on this DEIS. We agree with the Navy that the proposed expansion of training at the STCC will affect coastal zone resources, and we appreciate that the DEIS states that the Navy will submit a consistency determination for these activities. Please consider these comments in preparing your consistency determination.

Our most significant concerns are: (1) overall increases in noise levels from the large increase in levels of training activities, and in particular, the effects of such noise on habitat and public recreation; (2) expansion of training into currently protected sensitive habitat areas, in particular: (a) least tern and snowy plover nesting areas in Boat Lanes 8-10 in STCC-North (which are currently off limits to training during the nesting season); and (b) vernal pools in STCC-South; and (3) the proposal to limit the number of plover nests to be protected to no more than 22 nests. Despite the length of the document, it remains unclear as to why these decisions have been made and how decision criteria will be analyzed to determine whether such training is needed in these areas.

The Navy has narrowly construed the available alternatives being considered, in terms of those brought forth in the final analysis. The extensive increases in loud activities warrants serious consideration of conducting at least some of them, including the more intrusive ones, in less heavily populated areas, for both social and resource protection reasons. If the Navy does proceed as proposed, it will need to provide a more detailed and compelling explanation to establish that there are no available less damaging alternatives. We understand the concept of keeping training near the home base, but given that Camp Pendleton is within the same county, a clearer explanation is needed for dismissal of use of this site for the activities proposed in sensitive areas. Stating it is rejected based on the need to “achieve training tempo requirements” does not provide the reviewer with any information with which to assess this assertion.

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We understand that decision-criteria were used and are listed in the DEIS (on page 2-1). However the analysis explaining why the criteria are applied in certain situations (e.g., a statement on page 2-2 is that relocating some activities to STCC-S would conflict with criteria 2 and 6) is not provided. Also, we note that page ES-5 states the Navy bases its need projections on models of future exercises. While we inherently support and understand the Navy's need to train, without the modeling assumptions and additional information, it is difficult to weigh future training needs against environmental and social impacts.

Given that the Navy is proposing a significant expansion of training, which will increase conflicts with habitat protection, it would appear that listed species such as snowy plovers and least terns warrant *increased* protection, whereas the DEIS appears to be proposing simply to maintain the status quo (at least with respect to the number of snowy plover nests). We would argue that the increase in activities in Boat Lanes 1-7 would seem to make it all the *more* imperative that these species have an area set aside (during the nesting season) and left undisturbed.

Alternatives eliminated from further consideration include training at locations other than the STCC. It is not clear why proposed training in Boat Lanes 8-10 during the nesting season, which the Navy estimates (based on its models) to occur approximately 24 times/year, could not be relocated to Camp Pendleton, or why Camp Pendleton beaches could not "provide a realistic training environment that simulates real world littoral combat conditions."

The criteria provided by the Navy (DEIS, page 2-34) indicate these Boat Lanes would be used either: (a) when other suitable lanes are occupied, or (b) "if [lane] attributes make them more suitable for meeting training needs than other available training lanes." Examples of such attributes include beach topographic conditions, distance from other training locations, and a need for diversity in training locations. These criteria appear overly broad, and we believe there should be a much greater burden needing to be satisfied before the Navy would use these lanes. We question why, for example, if the Navy is able to modify beach topography for the purpose of attempting to discourage nesting in heavily trained areas, the Navy is not also able to modify beach topography to provide desired *training condition* topography in other areas (and thereby avoid Lanes 8-10 during the nesting season). If feasible, such an alternative should be explored for both Camp Pendleton beaches, as well as the remaining Boat Lanes at the STCC. If infeasible, the Navy should explain why.

The Navy's stated argument for eliminating the alternative of protecting all the snowy plover nests, rather than limiting protection to only 22 nests, is not well explained. Stating a third nest in a given training lane "could render the entire lane unusable" appears speculative, depending on the location of the nests. We would like historic information about conflicts the Navy has experienced in training in these lanes over, say, the past decade. For example, how often have there been more than two active plover nests within a given lane, and what has this meant for Navy training? Has the Navy had to cancel, modify, or relocate training? Is it a given that more than two active nests in a lane at one time makes the lane unusable? If

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so, please explain. Wouldn't the location of the nests (including proximity to each other, as well as to nests in other lanes) have an important bearing on this question? Has the Navy been able to successfully train in a lane when nests have exceeded two in that lane?

In addition, if there were greater numbers of nests, but most of those were in Lanes 8-10, which the Navy indicates would be used sparingly, then would it not be easier to protect more than 22 nests? Also, it is not clear how the number 22 was derived, when there are 14 Boat Lanes. If the number was derived from the number of lanes times two nests/lane, shouldn't that total be 28 nests?

It is also not clear from the document how the Navy intends to phase in the increased numbers of activities. If the timing of the increases allows sensitive areas proposed for training to be off limits for several years (or some other period) until they are needed, that should be considered as an alternative as well, or at least explained. We recognize that the Navy states these areas will not be used unless needed, but it would be helpful to understand the pace of the proposed increases.

We have similar concerns over the proposal to expand training to allow foot traffic in vernal pools. The DEIS does not make a compelling case that these pools could not be avoided. At a minimum, it is not clear why fencing (and thereby avoidance) of at least the smaller vernal pools could not be conducted consistent with training needs.

It appears from the discussion in several sections of the DEIS that the primary reason for dogs on the beach is for their exercise, and the primary *training* activities necessitating dog use occur at or near buildings (i.e., away from beaches and sensitive areas). We understand that the dogs are trained not to disturb wildlife, but wildlife may still be intimidated by dogs to the extent they could abandon nesting areas, especially in the cumulative context of overall increases in training levels. Is there a reason, for example, why dog runs could not be excluded from Boat Lanes 8-10 during the nesting season, with their exercise limited to other areas?

Page 3.6-24 states that loud activities would occur infrequently at night or on weekends. Can the Navy provide an estimate of the amount of proposed increases in loud noise-producing activities on weekends, holidays, and at night?

The reference on page 3.6-25 to noise mitigation (referring to Section 3.6.2) is presumably meant to be a reference to Section 3.6.1.6. Also, that section is rather vague. We would appreciate it if the Navy would spell out in greater detail how noise effects on sensitive species and on recreation will be factored into decisions on locating and timing training.

Page 3.9-12 discusses marine mammal monitoring during underwater detonations and pile driving. The discussion should describe how much training the marine mammal observers will receive. Also, we will want to be added to the list of entities contacted in the event of an

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observed marine mammal injury. We will also want to receive any monitoring reports on snowy plover, least tern, and/or vernal pool habitat impacts that the Navy may be providing to the U.S. Fish and Wildlife Service.

Page 3.1-15 references a new activity affecting public access, referenced as N14. New activities are only numbered N1-N11, so this may be a typo. Please identify this activity.

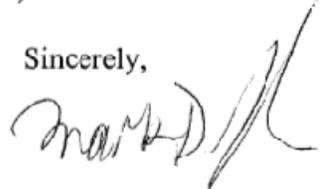
Page 3.12-26, Fig. 3.12-11, contains a graph showing plover nesting through 2008. Does the Navy have 2009 data for snowy plover nest numbers? If so, please provide, for all the sites shown in Fig. 3.12-11. Also, are there any plover nests yet this year? Please keep us apprised of current nest numbers and locations as the season progresses.

The City of Coronado's comments on the DEIS (Item No. 27) state that the ferry service to NASNI has been discontinued. As this service was, in part, mitigation for traffic impacts from the homeporting of nuclear aircraft carriers, please update us on the status of the ferry service.

Page 3.7-44 contains an error message.

Thank you for this opportunity to comment on this important Navy DEIS. If you have any questions about these comments, or about preparation of the Navy's upcoming consistency determination, please feel free to contact me at (415) 904-5289.

Sincerely,



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

cc: San Diego District Office (Deborah Lee)  
U.S. Fish and Wildlife Service  
National Marine Fisheries Service  
Cities of Coronado and Imperial Beach  
California Dept. of Parks and Recreation  
California Dept. of Fish and Game

## E.2.4 California Department of Fish and Game

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capacity, the Department administers the California Endangered Species Act, the Native Plant Protection Act, as well as other provisions of the California Fish and Game Code and Title 14 of the California Code of Regulations that afford protection to the State's fish and wildlife. The Department is also responsible for marine biodiversity protection and restoration in coastal marine waters of California. Pursuant to our jurisdiction, the Department would like the following concerns and issues regarding the project adequately addressed in the Final Environmental Impact Statement (FEIS).

### Biological Impacts and Mitigation Strategies

Increasing repetitive Navy training activities along with decreasing existing conservation measures may cause long term impacts and significantly add to cumulative impacts to terrestrial and marine species and their habitats. The Department has the following comments, concerns, and recommendations: 1) the FEIS should more fully analyze and address the potential cumulative or long term coastal ecosystem impacts associated with each phase and type of the proposed increased training/construction; 2) the FEIS should include additional studies and/or increased biological monitoring, additional conservation measures, and mitigation plans for the potential long term impacts to listed and sensitive terrestrial and marine species, rare and unique coastal strand habitat, and State- and federally-listed marine birds and their nesting habitat. 3) the Department views the Navy's proposed mitigation and decreases in avoidance and minimization measures for sensitive or listed species and the sensitive coastal strand, dune and eelgrass habitats, as insufficient protection and compensation from cumulative impacts.

#### 1) Cumulative or Long Term Impacts not fully Addressed in the DEIS:

The FEIS should address the potential for the following types of impacts and show how they will be avoided, minimized, mitigated and monitored for SSTC-North and South and Bayside Training Ranges as applicable:

- During bird nesting and California grunion (*Leuresthes tenuis*) spawning season the fully protected and state and federally endangered California least tern (*Sternula antillarum browni*) and the California species of special concern and federally threatened Western snowy plover (*Charadrius alexandrinus nivosus*) as well as other sensitive bird species and their habitats may potentially be impacted due to the proposed significant increases in vehicle, air and foot/dog traffic in the intertidal and upland areas of SSTC-North and South and bayside. A proposed buffer zone limiting bird nesting distribution and a proposal to eliminate sensitive habitat markers is described in the DEIS and indicates that the Integrated Natural Resources Management Plan (INRMP) for this area has been revised recently to support such a proposal. The Department was not aware that the Coronado INRMP (2002) was revised recently to support and accommodate a reduction in bird conservation. Additionally, the biological resource discussion does not clearly identify an analysis on how these sensitive species could potentially be affected due to cumulative impacts.
- After near shore disturbances, (training activities and construction), an increase in opportunistic, non-native, terrestrial and marine species may be seen within the project vicinity. An increase in non-native species would cause

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increased disturbance of ecosystem processes and decreased native biodiversity. This may be due to spreading/dispersal of non-native species during construction or from non-native species aggressively taking advantage of a newly disturbed area.

- Significant and repetitive vehicle, helicopter, and detonation impacts to terrestrial and marine biological resources, including sensitive and listed birds, may occur at the site causing cumulative impacts. Some of these effects may include the destruction of marine plants and algal species and their substrate such as surf grass, eelgrass and kelp species. Vehicle impacts from driving in the intertidal and on the beach may cause impacts to the kelp wrack on the beach used for forage and shelter by various terrestrial and marine species, including western snowy plovers that feed primarily on terrestrial and aquatic invertebrates (brine flies, brine fly larvae and brine shrimp). Significant burial or destruction of fish and their habitat from detonations may also occur at scattered rock bottom habitats that are found immediately offshore of the project site, thus reducing the prey base for California least terns that feed primarily on small fish. Vehicles may also impact active California least tern, Western snowy plover and other listed and sensitive bird eggs, chicks and nests. Helicopters flying over actively-nesting California least terns and western snowy plovers may flush adults off the nest and leave the eggs and chicks vulnerable to predation.
- Coastal strand habitat is an important and diminishing California natural resource and supports a unique ecological community (Dugan and Hubbard, 2009). The DEIS does not discuss the impacts to biodiversity and the uniqueness, importance and sensitivity of strand habitat nor how it should be conserved due to proposed increase in impacts.
- Significant fragmentation of marine and onshore habitats may occur due to the proposed increase in training activities and detonations in the intertidal, subtidal and upland. This may cause a reduction in habitat suitable for native species distribution especially as it relates to eelgrass on the bayside training range and onshore sensitive bird breeding, roosting, and foraging habitat.
- There are known Pismo clam, *Tivela stultorum*, beds near SSTC-North and South training ranges that are surveyed by the Department every year. Invertebrates are an important part of near shore and beach ecology. In particular, Pismo clams, a state managed and sensitive species, tend to develop high concentrations or beds on flat beaches in the surf zone and at the mouths of bays, rivers and estuaries. This makes them more susceptible to Navy vehicle training, detonations or burial impacts. Impacts to Pismo clams, as well as other concentrations of marine invertebrate species, should be identified, monitored and mitigated. The DEIS should have addressed the potential for these types of impacts.
- Sea level rise should be analyzed and addressed in the FEIS as a potential cumulative impact to unique and dwindling coastal strand habitat, eelgrass habitat and bird nesting habitat on beaches in southern California.

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2) Concerns and Recommendations related to Potential Cumulative and Long term Impacts:

Since the property leased by the Navy at SSTC-North is state-owned property and SSTC-South and bayside is adjacent to Silver Strand State Beach, the Department expects that a higher level of adherence to standard practices, as well as proposing additional mitigation and conservation measures for protecting sensitive coastal ecosystems and biological communities, will be practiced by the Navy as the tenant and neighbor of such land. The following comments and recommendations should be considered and addressed in the FEIS:

- Mitigation for 1.13 acres of eelgrass habitat loss is proposed in the DEIS based on Navy estimates. An enhanced monitoring and surveying program is recommended for the remaining eelgrass habitat that may be adversely affected before, during and after the proposed training activities and construction. The Department is concerned that the actual impacts to eelgrass and eelgrass habitat in this area may be significantly higher at the bayside Navy training range due to cumulative or long term impacts of proposed increased training.
- Monitoring plans that incorporate adaptive management for developing marine wildlife and habitat conservation measures are recommended. Monitoring plans should be developed in collaboration with the resource agencies. Experienced and qualified independent biologists should be retained to adequately implement the biological monitoring and studies.
- The Department recommends marking and avoiding all western snowy plover and California least tern nests and any suitable nesting habitat to offset impacts to these species that may occur as a result of the disturbances and activities (e.g., foot and vehicle traffic) associated with military training exercises.
- Existing buffer zones and signs to designate sensitive habitat (e.g., for California least tern and western snowy plover) should continue and be increased in the future for the proposed training increases on State property.
- The project should include a vehicle route plan that sufficiently avoids and minimizes impacts to sensitive species and habitats. The vehicle route plan should include, but not be limited to, the following areas: a) pismo clam beds and grunion nests; b) identified sensitive bird breeding, roosting, and foraging habitat and other significant biological areas of the intertidal, strand, and dunes; and c) beach wrack and eelgrass.
- Helicopters flying over actively-nesting California least terns and western snowy plovers should stay at least 500 feet above the ground to avoid flushing adults off the nest and leaving the eggs and chicks vulnerable to predation.
- To assess impacts of training activities on the California least tern and western snowy plover, the Department recommends annual documentation of the distribution of California least terns and western snowy plovers at SSTC-N in relation to the timing, number, type, and distribution of training activities in each training lane during the breeding seasons for these sensitive species.

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April 30, 2010  
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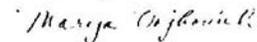
- The Department recommends increased enforcement of civilian and non-training trespass at SSTC-N to reduce impacts to the California least tern and western snowy plover.
  - The Department recommends that the FEIS address the potential occurrence of Pacific pocket mouse and coast horned lizard, and the potential for long-term conservation of these species on-site.
  - Grunion season monitoring and avoidance/minimization strategies should include but are not limited to the following:
    - a. When grunion monitoring surveys indicate grunion habitat exists on site, and significant grunion runs are seen, avoid sand disturbing activities during the grunion spawning season. The Grunion spawning season is typically March 1st to August 31st.
    - b. If avoiding the grunion spawning season is not feasible, then the Department recommends development of spawning and egg avoidance, minimization and monitoring plans for significant spawning events on site.
    - c. Predicted grunion spawning runs should be monitored prior to, during and post training or construction by a qualified grunion biologist.
    - d. Avoid sand disturbing activities in the intertidal areas during the two-week incubation period after significant spawning runs are seen. Subsequent monitoring should also indicate that no additional spawning has occurred before proceeding with sand disturbing activities. Identifying and marking grunion nests and use of buffer zones is another avoidance option.
    - e. In order to determine significant grunion spawning on the beach, monitoring plans should generally include four nights of monitoring with the first night being the night of the new or full moon. At least two hours of monitoring, the first day to begin after the peak high tide and the 2nd, 3rd and 4th days of monitoring should begin at least one-half hour before peak high tide. Two hundred grunion or more seen over the four day predicted spawning run beginning with the night of the new or full moon should be sufficient to indicate significant spawning activity.
- 3) Conservation Planning for Future Impacts to Listed and Sensitive Marine and Terrestrial Species and their Habitats.

The Department recommends that existing methods and criteria to designate species buffer zones and sensitive habitat should be revised to provide adequate fish and wildlife protection in order to accommodate the Navy's future proposed activities on and adjacent to state property located at SSTC-North and South and the Bayside. Such proposals should be approved by the resources agencies.

Kent Randall  
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The Department appreciates the opportunity to review and comment on the DEIS. As always, the Department is available to discuss our comments and concerns. For marine issues, please contact Ms. Loni Adams, Environmental Scientist, at (858) 627-3985 Marine Region, 4949 Viewridge Ave., San Diego, CA 92123 or [ladams@dfg.ca.gov](mailto:ladams@dfg.ca.gov). For bird and terrestrial issues, please contact Ms. Nancy Frost, Associate Wildlife Biologist, at 858-467-4208, South Coast Region, 4949 Viewridge Ave., San Diego, CA 92123, or [nfrost@dfg.ca.gov](mailto:nfrost@dfg.ca.gov).

Sincerely,



Becky Ota for Marija Vojkovich  
Regional Manager, Marine Region

cc: Ms. Sandy Vissman, Fish and Wildlife Biologist  
U.S. Fish and Wildlife Service  
6010 Hidden Valley Road  
Carlsbad, CA 92011

Mr. Eric Chavez, Marine Biologist  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
501 West Ocean Blvd., Suite 4200  
Long Beach, CA 90802-4213

Ms. Therese Muranaka, Associate State Archaeologist  
California Department of Parks and Recreation, SD Coast District  
4477 Pacific Highway  
San Diego, CA 92110

Ms. Loni Adams  
Department of Fish and Game  
4949 Viewridge Ave.,  
San Diego, CA 92123

Ms. Nancy Frost  
Department of Fish and Game  
4949 Viewridge Ave.,  
San Diego, CA 92123

Ms. Vicki Frey  
Department of Fish and Game  
619 2<sup>nd</sup> Street  
Eureka, CA 95501

#### **REFERENCES**

*Dugan and Hubbard. 2009. Loss of Coastal Strand Habitat in Southern California: The Role of Beach Grooming. Estuaries and Coasts Journal. January, 2010. Pg. 1-11.*

## E.2.5 California Department of Parks and Recreation

**Representing:** Organization

**Organization:** California Department of Parks and Recreation

**Name:** Therese Muranaka

**Date:** 1/26/2010 6:57:31PM

**Subject:** Cultural Resources

**Comment:** As the California Department of Parks and Recreation archaeologist (Silver Strand State Beach) assigned to comment on this EIS, may I have contact information for your cultural resources staff for specific questions prior to my formal comments? Therese Muranaka, Ph.D., R.P.A. Associate State Archaeologist California Department of Parks and Recreation San Diego Coast District 4477 Pacific Highway San Diego, CA 92110 619-778-2553 [tmuranaka@parks.ca.gov](mailto:tmuranaka@parks.ca.gov)

## E.2.6 California State Parks

STATE OF CALIFORNIA - RESOURCES AGENCY

Arnold Schwarzenegger, Governor



DEPARTMENT OF PARKS AND RECREATION

San Diego Coast District

4477 Pacific Highway  
San Diego, CA 92110  
(619) 688-3260 FAX (619) 688-3229

RUTH COLEMAN, DIRECTOR

March 9, 2010

Kent Randall  
Naval Facilities Engineering Command Southwest  
Code: OPME  
2730 McKean St. Bldg. 291  
San Diego, CA 92136-5198

Dear Mr. Randall,

California State Parks (CSP) appreciates the U.S. Department of the Navy (Navy)'s commitment to resource conservation in the southern San Diego region. This commitment is particularly evident with respect to conservation of California least tern and Western snowy plover. CSP appreciates the effort put into the Silver Strand Training Complex Draft Environmental Impact Statement (Draft EIS), including its documentation of our region's natural and cultural heritage and its review of the complex responsibilities charged to the Navy. CSP has several concerns with the proposed project with respect to sensitive species conservation, adequate mitigation for impacts to sensitive species, lack of specificity concerning increased presence of emissions and hazardous materials, and potential impacts to marine life within the adjacent off-shore property that is considered part of Silver Strand State Beach. This letter also includes comments on cultural resources for lands adjacent to park holdings, and questions the effects of increased ground and air traffic on the experience of visitors at Silver Strand State Beach.

The Draft EIS proposes:

- the continuation of current training and test and evaluation activities conducted within the study area;
- an increase in training tempo from baseline conditions and additions to types of training;
- the carrying out of existing, routine training at additional locations within SSTC established training areas;
- the introduction of new platforms and equipment;
- increased access and availability to existing beach and inland training areas.

Noted in section 3.1.1.5.2 SSTC-N Surrounding Land Use, and elsewhere throughout the document, the text and figures incorrectly refer to "Silver Strand State **Park**", instead of the correct title of "Silver Strand State Beach". In addition, the document omits recognition of the Silver Strand Natural Preserve. A Natural Preserve is a CA State land designation used to identify the presence of highly significant natural resources. CSP feels that the Draft EIS should include specific mention of this land designation and also, where appropriate, denote its boundaries in figures within the document. Similarly, the Draft EIS should note the extent of marine area managed by CSP. California State Parks holds fee title to off-shore lands, 3 miles out, that include, roughly, boat lanes 3 through boat lane 10 and extends to the southern end of

Kent Randall  
March 9, 2010  
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Silver Strand State Beach. CSP should be both considered and listed as an “affected jurisdiction” on the EIS Cover Sheet, and throughout the document as a whole.

CA State Parks understands that the Navy must allow for a significant level of flexibility when forecasting training needs, however we also feel that take of endangered species should be avoided or mitigated appropriately. The proposed expanded use of the training grounds, especially Beach Blue 2, Beach Orange 1, and Beach Orange 2, will most likely result in take of California least tern and Western snowy plover, and deter and disrupt current levels of nesting. CSP feels that the proposed mitigation for this take offered in the Draft EIS is inadequate to meet the standards of the U.S. and California State Endangered Species legislation. The Draft EIS lacks specificity with respect to training activities to adequately quantify potential take of protected species. Therefore, identification of an appropriate mitigation agreement prior to project implementation is difficult. Although options exist for additional on-site mitigation and avoidance, and those options should be further explored, we offer the following suggestions for a potential off-site mitigation scenario:

1. Commit to increased level of avian monitoring necessary to accurately quantify take of tern and plover resulting from the proposed actions in the Draft EIS.
2. Continue consultations with USFWS to develop an adaptive management agreement in which take of tern and plover is appropriately mitigated through suitable actions. Based on the success the U.S. Navy has had with the establishment of the 75-acre preserve at Delta North and South, it seems that a similar mitigation scenario could offer the appropriate long-term mitigation. Opportunities exist in the region for creation of additional off-site nesting locations.

It is the understanding of CSP that the Navy’s current Western snowy plover avoidance protocol involves the buffering of each snowy plover nest that is located during the breeding season. The Draft EIS proposes to reduce this management action such that only 22 concurrent plover nests are buffered. This proposed decrease in avoidance measures, when coupled with the proposed increase in training, presents a management scenario in which take of Western snowy plover, above current levels of take, seems likely. The Draft EIS does not appear to include adequate mitigation for this increased take of Western snowy plover.

CSP ownership at Silver Strand State Beach extends 3 miles out to sea. This off-shore portion of Silver Strand State Beach generally includes Boat Lanes 3 through 10 and is adjacent to Boat Lane 11, which immediately borders Silver Strand SB to the south. The EIS fails to adequately consider the effects on this area or proposed appropriate mitigation of its actions. This area was created to ensure the public’s continued enjoyment of the coastal marine environment. It is the Navy’s responsibility, as part of the EIS, to delineate this state ownership and to evaluate the EIS proposals’ potential effects on the public’s use of this off-shore area.

In addition, the 3-mile marine area is eligible to be designated as a State Marine Protected Area. While CSP appreciates the consideration of marine life already included within the Navy’s

Kent Randall  
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protocol for disruptions to the under-water acoustic environment we are concerned that existing activity and increases proposed in the Draft EIS will result in additional harm to marine life that use waters managed by CSP. CSP requests that activities involving acoustic disturbances known to damage marine life (pile driving, underwater detonations, SWAG operations, blasts, pyrotechnics, etc.) be located at distances far enough from ocean waters managed by CSP such that impacts to resources within these waters are avoided.

Current and increased naval activity in SSTC South, particularly in Beach White 1 and Beach White 2, may result in disturbance to Western snowy plover dependent upon protected habitat within the adjacent Silver Strand Natural Preserve, managed by CSP. CSP requests that the Navy inform CSP staff of training activities in this region such that CSP staff can accurately monitor potential impacts from these adjacent land uses. If negative effects are documented, CSP requests that the Navy work with CSP and USFWS to mitigate these negative effects.

CSP appreciates the Navy's assistance with the clean-up of expended materials that occasionally wash to shore on SSSB and the SSNP. CSP is concerned that some of the activities proposed in the Draft EIS will result in additional occurrences of munitions constituents and other expended materials on the public beaches managed by CSP. CSP requests that the Navy continue this cooperation and allow for increased communications and response for clean-up of future expended materials found on SSSB and SSNP. Additionally, CSP requests that Navy staff work with CSP interpretive staff to identify interpretation needs and public education and outreach necessary to protect the visiting public and CSP staff from these potential dangers.

CSP is concerned that the activities proposed in the Draft EIS will result in Naval activity (training exercises, aircraft fly-over, beach landings, traversing from SSTC North and SSTC South, etc.) on or over SSSB and SSNP. CSP is a public safety agency and as such is committed to protecting the resources and visitor experience on these beaches. CSP requests that any desired increased use of CSP-managed lands be approved by the CSP San Diego Coast District Superintendent prior to initiation.

The natural landform and habitat present within SSTC South is extremely unique and regionally rare. The Draft EIS proposes increased impacts to this valuable resource but fails to propose adequate mitigation. The proposed training in the vernal pools exemplifies this oversight. Every effort should be made to protect the vernal pool resources and other unique habitat elements found in SSTC South. Proposed activity within the vernal pools when dry has the potential to disrupt the soil integrity and the long-term sustainability of this habitat, the plant life and the San Diego fairy shrimp that occupy this niche. If the Navy must increase training within the sensitive habitats of SSTC South, the impacts should be quantified and appropriate mitigation measures should be undertaken.

Table 3.3-4, "Operational Emissions at SSTC and Portions of NASNI with Evaluation of Conformity" reports emissions increases of monitored pollutants at levels anticipated to be up to nearly 4 times the 'No Alternative' emissions estimation. Additionally, the Draft EIS mentions hazardous air pollutants (HAP's) but provides inadequate data for assessment of the current level

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March 9, 2010  
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of HAP's emitted by Naval activities and anticipated proposed increases. Given these proposed increases, and the apparent lack of data on HAP's, CSP feels that the Navy should increase its commitment to monitoring and reporting air pollutants throughout the region to all affected jurisdictions. Specific attention should be directed toward supplementing existing monitoring protocols with sampling stations and efforts that allow the Navy to identify the contribution of Naval-generated emissions, including HAP's, long-term, and to mitigate appropriately when necessary.

The Draft EIS contains a fairly extensive write-up on the policies, plans and regulations that govern the management of hazardous materials at SSTC however, given the relatively short public review period, an adequate review of these reference materials was not possible. The Draft EIS does note that, under the Preferred Alternative, the amounts of expended training materials would increase, the weight of expended flare and smoke canister residues would increase and the amounts of residues from detonations of underwater explosives would increase. The EIS would benefit from a more specific discussion of the updated offshore petroleum discharge system (ES-9). CSP is concerned with the health of the environment for the park visitors, State Park staff, local public, and the sensitive natural resources living in this region. Review of this section would be facilitated by the inclusion of data from studies that have evaluated levels of hazardous materials in the local environment with particular inclusion of effects on sensitive receptors. CSP feels that, with the proposed increases in expended materials, the Navy should clearly outline and commit to a testing and evaluation protocol designed to identify the degree to which hazardous materials may or may not be emitted through the SSTC operations, and the levels at which they are accumulating in the local environment. Additionally the Draft EIR states that the Navy submits EPCRA 312, Tier II forms to the emergency responders (Fed Fire) and the San Diego County Certified Unified Program Agency (CUPA), and the EPCRA 313 Toxic Release Inventory (TRI) Form R to USEPA, with courtesy copies to the California Environmental Protection Agency (Cal-EPA) and the Regional Water Quality Control Board. CSP feels that we would benefit from updated knowledge on this subject and requests that these forms be submitted to the Peace Officer Lifeguard staff stationed at Silver Strand State Beach.

The Draft EIS does not include an adequate assessment of the potential negative effects of increased activities, especially amphibious and beach activities, on spawning success of the California grunion. This species is largely endemic to Southern California and requires undisturbed natural intertidal sandy beach habitat. The Navy manages a significant portion of this species remaining suitable spawning habitat. Potential negative effects to this species should be quantified, avoided when possible, and mitigated when necessary.

Given the level of detail for specific training schedules provided in the Draft EIS, it is also difficult to assess the long-term impacts of the proposed increased activities on rare and special-status plant species occurring within the SSTC (*Cordylanthus maritimus* ssp. *maritimus*, *Astragalus tener* var. *titi*, and others listed in Table 3.11-2). CSP shares conservation responsibility with many of these resources and is committed to providing high quality habitat for the successful persistence of these species. CSP feels that the proposed activities in the Draft EIS have the potential to result in significant negative population-level effects for these special-status and rare plants. Suggested additional mitigation measures for rare and special-status plants found in the SSTC may include such actions as:

Kent Randall  
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1. Annual population-level surveys that quantify various impacts from increased training activity;
2. Commitment to a regional rare plant conservation program in which unavoidable impacts resulting from increased training activities are mitigated through off-site restoration and enhancement. Contribution toward a special status and rare plant conservation seed-bank should also be explored;
3. Further consideration and implementation of on-site special-status and rare plant preserves and protected conservation areas.

Section 3.11 should address the potential occurrence of Pacific pocket mouse, and the applicability of SSTC South as a viable habitat for long-term conservation of this species.

Section 3.11 should address coast horned lizard presence and conservation.

Section 3.12 should more accurately address the level to which the SSTC is critically important to the long-term sustainability of healthy migratory and shore bird populations throughout the Pacific flyway. Potential long-term negative effects from the proposed increases identified in the Draft EIS should be more accurately quantified and appropriate mitigation and avoidance measures proposed.

Section 3.13 addresses cultural resources on lands adjacent to CSP properties. CSP reviewers found the history of dredging on the strand inadequate to review mitigating measures, and as a result, questioned conclusions such as:

As mentioned in 3.13.1.1.2, the training areas in SSTC-North are located on fill deposits that resulted from the dredging of San Diego Bay and the construction of Zuniga Jetty. These fill areas have no potential for in situ heritage resource deposits (3.13-5).

From experience on adjacent CSP properties, the dredged areas are non-contiguous, and depending upon depths, cover cultural materials that should be addressed both in the SSTC-North and SSTC-South areas. Should the SSTC-South prehistoric sites assumed to be eligible to the National Register have been on CSP land, the 'Summary of Effects' (Table ES-2) conclusion that foot traffic is not an adverse impact would have been questioned. This is especially true to the west of the highway where CSP staff have noted cultural materials in shell middens located undisturbed within centimeters of the surface.

Regarding submerged cultural sites, underwater shipwrecks and other offshore cultural materials deserve better protection than promised avoidance. As reported in the cultural resource history, Manila galleons have been passing Silver Strand since 1565. The more deeply-submerged prehistoric materials would be difficult to impact with the increased operations described, but some of the submerged historic sites will be impacted by the activities in Alternatives 1 and 2. Assurances that more specific locations and depths will be recorded with the federal clearinghouse (the South Coastal Information Center), and that Navy cultural resource managers will take an active part in designing these avoidances is requested.

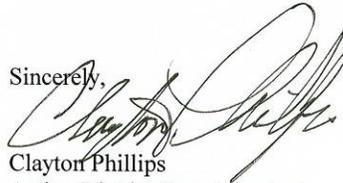
Kent Randall  
March 9, 2010  
Page 6

The EIS considers the potential effects on traffic flow and concludes that the capacity of Highway 75 will not be significantly affected. However, CSP is also concerned about the effects that the significant increase in military operations will have as a distraction to motorists on Highway 75. The potential for creating hazardous driving conditions due to military distractions may be exacerbated during peak beach visitation periods. The EIS should analyze this aspect of its proposals potential effects on highway safety and propose appropriate mitigations.

Nearly ½ million people visit Silver Strand State Beach each year, most during the spring and summer between April 30 and September 15. The EIS fails to adequately evaluate the effect that increased military operations will have on the visual experience these beach goers have grown accustomed to. Visitors come to Silver Strand to enjoy surf-play, wide sandy beaches and eye-level views of the ocean, framed by scenic Pt. Loma (to the north) and the Coronado Islands (to the south). The EIS needs to propose means by which the negative visual effects of increased military operations can be minimized, including, but not limited to, considering the seasonality of operations.

California State Parks appreciates the opportunity to comment on the DEIS and hopes that our comments contribute to a better project.

Sincerely,



Clayton Phillips  
Acting District Superintendent  
California State Parks  
San Diego Coast District  
4477 Pacific Highway  
San Diego, CA 92110  
[cphillip@parks.ca.gov](mailto:cphillip@parks.ca.gov)

## E.2.7 California State Parks

Representing: Organization

Organization: California State Parks

Name: Clayton Phillips

Date: 3/9/2010 8:16:53PM

Subject: Other

Comment: Please see our 5 page letter which was dropped in the mail this date, March 9, 2010. Please don't hesitate to call with any questions, Clay Phillips

**E.2.8 California State Lands Commission**

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, *Governor*

**CALIFORNIA STATE LANDS COMMISSION**  
 100 Howe Avenue, Suite 100-South  
 Sacramento, CA 95825-8202



**PAUL D. THAYER**, *Executive Officer*  
 (916) 574-1800 FAX (916) 574-1810  
 Relay Service From TDD Phone 1-800-735-2929  
 from Voice Phone 1-800-735-2922

**Contact Phone:** (916) 574-1814  
**Contact FAX:** (916) 574-1885

March 22, 2010

File Ref: Silver Strand Training Complex  
 Draft EIS, US Navy, San Diego County

Mr. Kent Randall  
 Naval Facilities Engineering Command Southwest  
 Code: OPME  
 2730 McKean St. Bldg. 291  
 San Diego, CA 92136-5198

**Subject: Silver Strand Training Complex Draft Environmental Impact Statement, United States Navy, North Island, San Diego County**

Dear Mr. Randall:

Staff of the California State Lands Commission (Commission) has reviewed the above referenced document and offers the following comments on the draft Environmental Impact Statement (DEIS). We understand that this project has not undergone review under the California Environmental Quality Act (CEQA). Depending on what other State or local agencies have discretionary action over the proposed project, the CSLC may take the role of a Lead Agency or a Responsible or Trustee Agency under CEQA.

As background, the State acquired sovereign ownership of tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. All tidelands and submerged lands, as well as navigable rivers, sloughs, etc. are impressed with the Common Law Public Trust.

The Public Trust is a sovereign public property right, in the nature of an easement, held by the State or its delegated trustee for the benefit of all the people. This right limits the uses of these lands to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, open space, or other recognized Public Trust purposes. A lease from the CSLC is required for any portion of a project extending onto state-owned sovereign lands, which are under its exclusive jurisdiction. As to lands involving the Public Trust Easement, the property is subject to certain land use restrictions and public rights and any inconsistent use with the easement may be prevented by the CSLC.

CSLC has issued a lease to the Navy for a portion of the beach at the Silver Strand, Lease PRC 6319.9, between the Ordinary High Water Mark of 1941 and the Ordinary High Water Mark of 1948. The Pacific Ocean waterward of the Ordinary High Water Mark of 1948 is not covered by a lease from CSLC.

Kent Randall

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March 22, 2010

Based on a review of the information provided, it has been determined that the Alternative 1 (Preferred Alternative) for the proposed project will be located within state sovereign lands under the leasing jurisdiction of the Commission. The U.S. Navy will need to apply to the Commission for a lease for that portion of the beach which is not currently covered by the existing lease.

The Commission will need to make a CEQA determination prior to consideration of lease approval. Based on the information provided in the DEIS, a CEQA document will most likely need to be prepared for the proposed project in order to cover our discretionary action (lease within state sovereign lands). The CEQA document would need to include all information required under Public Resources Code, section 21000 et seq., including identifying the project's potentially significant impacts and mitigation measures to clearly avoid or mitigate those significant impacts. Public review and all appropriate noticing of the CEQA document (CEQA Guidelines, sections 15072 and 15073), as well as a Mitigation Monitoring Program, will need to be completed.

In addition to the information provided in the EIS, the CSLC would need copies of any cultural resource reports completed on land under the jurisdiction of the Commission. Any artifacts found on lands under the jurisdiction of the Commission are considered the property of the state of California. Any disposition of these artifacts requires the approval of the Commission and a transfer of title may be required.

The Commission would also like to receive copies of the following documents:

- Applicable State regulatory agency permit applications prepared for the project; and
- California Coastal Commission Consistency Determination if or when available.

If you have any questions regarding the lease application process, please contact Alan Scott at (916) 574-1861 or by e-mail at [scotta@slc.ca.gov](mailto:scotta@slc.ca.gov). If you have any questions regarding environmental issues, please contact Christopher Huitt at (916) 574-1938 or by e-mail at [huittc@slc.ca.gov](mailto:huittc@slc.ca.gov).

Sincerely,



Marina R. Brand, Acting Chief  
Division of Environmental Planning  
and Management

cc: A. Scott, CSLC  
C. Huitt, CSLC  
M. Brand, CSLC

## E.2.9 City of Imperial Beach, California, Office of the City Manager



### *City of Imperial Beach, California*

OFFICE OF THE CITY MANAGER

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March 5, 2010

Mr. Kent Randall  
 Silver Strand Training Complex EIS  
 Naval Facilities Engineering Command, Southwest  
 1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
 San Diego, CA 92132

Dear Mr. Randall:

The City of Imperial Beach appreciates the opportunity to review and comment on the environmental document that assesses the potential impacts of the Navy's proposal to provide increased operationally and realistic training for naval personnel at the Silver Strand Training Complex (SSTC).

The City also appreciates the national security role that the Navy provides for the country. However, the City suffers fiscally and economically in not being able to fully exploit our beach-oriented resources for our tourist industry. The City has embarked upon an aggressive redevelopment program to enhance this economic base and make overall quality-of-life improvements to the City. The City is apprehensive that increased military activities in our area might result in impacts that would work against the City's efforts to provide an attractive and quiet environment in which to live and work. We believe that we can work together in mutually achieving the City's goals and the Navy's mission to provide adequate training for our military personnel. It is in this spirit that we offer the following comments on the environmental document:

1. Due to limited staff and time, our review was not as thorough as we wished. Also given the length of the document and approximately a decade it took to prepare, we request an additional review period of 45 days.
2. The DEIS does not adequately allow a reader to assess the current and proposed activities within each lane and thus it's difficult to distinguish the impacts in the southern zones from the northern ones, and the changes from current to proposed activities.
3. With the increase in aircraft activities and firearm discharges, we request that helicopter sorties and firearm discharges stop no later than 10:00pm and start no sooner than 7:00 a.m.
4. In light of the decrease in beach access due to the increase of training activities, we suggest three mitigation steps:
  - a) The Navy create an alternative pathway running from the general vicinity of the western end of Carnation Street heading in a northeasterly direction along the perimeter of the southern boundary of the base (roughly the northern boundary of IB) to the eastern boundary of the base that parallels SR-75; then proceeding northward on an existing path

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currently available to the public until the path ceases a bit south of the Cays; then proceeding in a northwesterly direction on Navy property to connect with Silver Strand State Park. This would provide walkers, joggers, runners, bicyclists a north-south pathway/trail to mitigate for the loss of beach access.

- b) People also walk their dogs along the part of the beach that will be greatly affected by the increased training, and therefore we suggest that the Navy create and maintain a "dog park" somewhere along the southern perimeter of the base somewhere east of Camp Surf. (The Navy had allowed the public to use an area just east of the entry gate on Silver Strand in IB as a dog park. The area is now closed to the public, but it is a possible site to mitigate the impact of the training activities that reduce access to the beach.)
- c) The Navy should assist in funding beach sand replenishment efforts. For example, the Navy could help the Corps of Engineers with dredging the entry to San Diego Bay and placing the dredge materials (sand) nearshore or on the beach along the coast of Imperial Beach. The City prefers that sand be placed onshore because this is the best way to preserve our beaches. Preserving the beach between Carnation Street and the mouth of the Tijuana River would be a measure that mitigates the reduced beach access caused by the increase of naval activities along the Silver Strand north of Carnation.

4. In light of the overall increase in noise due to helicopter activities, firearms and other training activities, mitigation activities should include:

- a) Strict adherence to flight patterns at Ream Field that will not allow fixed-wing and helicopter flights over homes in Imperial Beach.
- b) There should be no helicopter training at Ream Field after 9:30pm. All flights should be heading back to their home base after 9:30pm.
- c) Work with the City in developing a more effective notification system of planned training activities that have the potential to impact residents of Imperial Beach (in addition to the standard notification provided to our Public Safety Department when exercises involve pyrotechnics or firearm discharges).



Navy Silver Strand Training EIS

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March 5, 2010

5. Table 3.6-9 indicates that Camp Surf is situated further away from the noise source than the residential areas of Imperial Beach when the other tables show Camp Surf closer to the noise source than the Imperial Beach residential areas. Please explain.

**Table 3.6-9: Sound from Blanks used during Immediate Action Drills**

Sensitive Receptor	Approximate Distance (feet/m)	Sound Level (dBA)	
		Peak	One-Hour L <sub>eq</sub>
Coronado Shores	5,950 / 1,810	74	67
Rendova Housing	2,260 / 690	83	75
Military Family Housing / Silver Strand Elementary School	5,370 / 1,630	75	68
Coronado Cays	13,110 / 3,990	68	60
Silver Strand State Beach	10,390 / 3,160	70	62
Coronado Cays	2,560 / 778	80	72
Silver Strand State Beach	890 / 271	80	72
South Bay Biological Study Area	8,790 / 2,672	81	73
YMCA Camp Surf	16,520 / 5,022	77	69
Imperial Beach Residential	13,820 / 4,201	75	67

Note: Peak noise levels and L<sub>eq</sub>'s estimated from reference sound level of 99 dBA at 350 feet and the source-receptor distances shown above, assuming distance attenuation of six decibels per doubling of source-receptor distance for a point source.

Again, we extend our appreciation for your outreach efforts to involve our community in being able to comment on this document.

Sincerely,



Gary Brown  
 City Manager  
 City of Imperial Beach

cc: file  
 City Council  
 Greg Wade, Community Development Director  
 Jim Nakagawa, City Planner  
 Jim Benson, City of Coronado

## E.2.10 City of Imperial Beach, California, Office of the City Manager



### City of Imperial Beach, California

OFFICE OF THE CITY MANAGER

March 30, 2010

Mr. Kent Randall  
 Silver Strand Training Complex EIS  
 Naval Facilities Engineering Command, Southwest  
 1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
 San Diego, CA 92132

Dear Mr. Randall:

The City of Imperial Beach appreciates the additional time the Navy has afforded the public to review and comment on the environmental document that assesses the potential impacts of the Navy's proposal to provide increased operationally and realistic training for naval personnel at the Silver Strand Training Complex (SSTC).

The City offers the following additional comments on the environmental document:

1. The City of Imperial Beach concurs with the comment by the City of Coronado that the DEIS does not adequately address the increased environmental impacts to surrounding properties that would result with the proposed activities. While the DEIS acknowledges that the preferred plan will result in increased impacts, additional or more effective mitigation measures are not proposed to reduce the impacts preferably to a level of insignificance. The lack of mitigation measures despite the major increase in activities and impacts seems, at best,



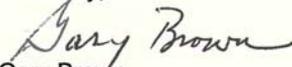
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illogical. Mitigation measures are necessary to reduce the significant impacts resulting from the increase in quantity and types of activities proposed.

2. The City also wishes to modify our previous comment of our letter of March 5, 2010 wherein the City proposed a pedestrian and bicycle path from Carnation Avenue to Silver Strand State Park. We would like to refer to this path as a "Proposed Coastal Mitigation Trail" due to the potential loss and/or adverse impacts to the existing and long-utilized beach access along the shoreline adjacent to the Navy Radio Receiving Facility (NRRF).
3. We request that the Draft EIR carefully analyze the impacts the increased activities will have on traffic on SR 75 and Palm Avenue to Interstate 5.

Again, we extend our appreciation for being able to provide additional comments on this document.

Sincerely,

  
Gary Brown  
City Manager

cc: file  
City Council  
Greg Wade, Community Development Director  
Jim Nakagawa, City Planner  
Jim Benson, City of Coronado

**E.2.11 City of Coronado, Office of the City Council – Carrie A. Downey****CITY OF CORONADO  
OFFICE OF THE CITY COUNCIL**1825 STRAND WAY  
CORONADO, CA 92118CITY HALL  
(619) 522-7320

March 30, 2010

By: email submittal and follow up hard copy

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> floor  
San Diego, CA 92132

RE: Silver Strand Training Complex Draft EIS

Dear Mr. Randall:

Thank you for extending the draft environmental impact statement (DEIS) public comment review period. It allowed me to speak with Coronado citizens that were unable to review and understand the DEIS prior to the earlier March deadline.

I submit these comments individually as a City Councilwoman for the City of Coronado [hereinafter Coronado] in which the proposed increased training will occur. I incorporate the concerns raised in Coronado's official comments submitted by Acting City Manager James Benson on March 4, 2010 and provide additional concerns as a parent with children in the Coronado Unified School District (CUSD), as a business owner who works in the area covered by the proposed increased training and as a resident of the City of Coronado.

The citizens of Coronado appreciate and support the training of our military forces to insure their safety and efficacy when they are sent to perform their duty in hazardous conflicts around the world. However there needs to be a balance between developing realistic training scenarios on bases and ranges that are in the midst of highly developed residential areas. I provide the following additional recommendations for traffic, noise, and public safety mitigation. These actions would increase the cooperation between Coronado residents and the Department of the Navy (DON) for status quo operations, as well as for Alternative A increased tempo operations.

1. Mitigation Measure 3.16.2.4.1 Exercise Planning. The DEIS lists the blanket statement "The Navy considers public safety in planning its exercises. Factors considered in

## Coronado City Councilwoman Carrie A. Downey SSTC EIS comments

evaluating the impact of the training on public safety include proximity of the activity to public areas; access control; schedule (time of day, day of week); public notification....”

Considering isn't the same thing as doing. DON should notify the Coronado City Manager and CUSD Superintendent of ANY change in daily operations greater than 1% over the status quo. This is different than 1% over baseline in the DEIS. As the document points out the navy is attempting to get the historical activities NEPA compliant not what is currently taking place. “The U.S. military commenced operations in Afghanistan and Iraq as part of the Global War on Terror; the deployment of units overseas caused many range complexes, including SSTC, to experience temporary decreases in usage....Thus to include additional: A) personnel movements, B) equipment or supply deliveries, C) vehicle (including boats, cars, tanks, helicopter drop offs, etc.) that could increase traffic or noise levels, and/or security procedures at the base gates. In the past all of these activities have caused significant traffic delays among Coronado residents without explanation.

Currently the Department of the Navy notifies Coronado in advance of the deployment and return date of the aircraft carriers home ported in Coronado. This allows Coronado to make operational changes in the public safety and public works departments to have the appropriate city staff on hand to try to move civilian traffic should the need arise. Likewise the City Public Works Department makes sure Coronado does not schedule sewer repair work, or CALTRANS does not schedule road repair work on days where the military bases on Coronado will be experiencing increased traffic going to and from the bases. This system has worked well for large events such as movement of aircraft carriers but it would work equally well for events that do not rise to the level of a ship's movement but would increase traffic and noise in the surrounding community such as using the beaches and or base facilities as part of a Fleet exercise or other larger training evolution.

Should the Navy need to use all 14 of the beach lanes in the Silver Strand Training Complex (SSTC) at both ends of Coronado, this would undoubtedly raise the noise levels and traffic along the Silver Strand Highway past the Coronado Cays residential development and the Silver Strand Elementary School. Both contain sensitive noise receptors, as acknowledged on page 3.6.1.4.1. The advance notification to the CUSD Superintendent would allow the option to move planned outside activities at the Silver Strand School inside or reschedule them to avoid the additional noise and or distraction it would provide the students. It would allow notification to the parents living in the Cays to expect increased traffic on the strand during school drop off time in the morning to insure school start time is not delayed.

2. Silver Strand Elementary School. Although the DEIS identifies Navy Housing areas on Naval Base Coronado within the SSTC, and the location of the Silver Strand Elementary School, Table 3.6-4 Acoustic measurements during Fleetex 2002 does not provide measurements for the Silver Strand School. Please provide those measurements or an explanation that they were not measured or is too far to receive noise from Fleetex if that is appropriate.

Noise and traffic are not the only concerns for students and parents at the Silver Strand School. The lease agreement between CUSD and the Department of the Navy is an example of how the military and community can work together to best serve the needs of military families

## Coronado City Councilwoman Carrie A. Downey SSTC EIS comments

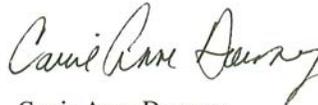
and the community. The majority of the students educated at the Silver Strand Elementary School are dependants of active duty military service members, however there is a significant portion that reside in the Coronado Cays housing development that may not have exposure to military training or military weapons. The DEIS does not explain in depth what types and frequency of training will be visible to the students attending Silver Strand Elementary School.

Under Alternative 1, the DEIS states in Section 3.16.3.3 that "SSTC land training activities would not employ live ammunition, with the exception of shotgun shells for breacher training and small arms for training inside bunkers on SSTC-S. ...Flares, smoke grenades, and other small pyrotechnics unused in training do not release projectiles or scatter fragments, and thus have no potential for effects in the absence of direct contact."

While some students would enjoy glimpses of military training, others may become frightened by the sight of Navy SEALs coming ashore with weapons. The exact nature of the visuals students and staff at the school could be exposed to should be clarified. Additionally, if there will be no live weapons of any kind used within sight of the school that needs to be clarified. The teachers and staff should be aware in advance of what might distract their students during lessons and plan accordingly. Advance notice to the CUSD Superintendent would be appropriate mitigation.

Thank you for the opportunity for extended comments by the military. The relationship between the Coronado and the military is an important part of this community. No one likes surprises, least of all those responsible for planning municipal or educational organizations. I request that the Final EIS respond to the comments filed by Coronado on March 4<sup>th</sup> and address the issues I raised above with appropriate mitigation.

Respectfully,



Carrie Anne Downey  
Coronado Councilwoman

**E.2.12 City of Coronado, Office of the City Manager – James F. Benson****CITY OF CORONADO**

1825 STRAND WAY  
CORONADO, CA 92118

OFFICE OF THE CITY MANAGER  
(619) 522-7335  
FAX (619) 522-7846

March 4, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> floor  
San Diego, CA 92132

Re: Draft EIS for Silver Strand Training Complex

Dear Mr. Randall:

The City of Coronado has reviewed the above document and concluded that further information and analyses are required to determine the cumulative environmental impacts associated with the planned activities for the Silver Strand Training Complex (SSTC). Of particular concern are the statements contained throughout the document that the military facilities and/or operations are not expanding; rather, just the frequency; therefore, no environmental mitigation is required.

The draft EIS contains several areas where it acknowledges new operations and new activities will be occurring at SSTC. If more military operations and activities will be occurring at SSTC, then more personnel will be arriving in Coronado, and more vehicles will be commuting to and through Coronado impacting local streets. Not only will the additional traffic lead to impacts to intersections currently at unacceptable Levels of Service, but the overall preferred plan of continued plus new activities and operations will lead to significant cumulative impacts on traffic, noise, greenhouse gas emissions, and the public's access to utilize the waters of the State, which, when considered together, should be mitigated.

Please revise the draft EIS to address the questions and concerns described on the attachment.

Of note is that the draft EIS does not appear to adequately address the expanded activities of the Preferred Alternative and associated traffic, noise, and coastal access impacts to surrounding properties within SSTC corridor, both individually and cumulatively. The draft EIS acknowledges increased noise impacts, durations, and sound levels; however, no mitigation is proposed based upon the assumption that activities currently exist and there will be an expansion over a broader area that will minimize noise impacts. The draft EIS needs to be revised to properly address, analyze, and quantify the items detailed in the list attached to this letter.

SSTC EIS  
Page 2



Lastly, it was pointed out to the Coronado City Council at their meeting of March 2, 2010, that the citizens of Coronado have not had adequate time to review this document. Given the fact that the plan has been under study since 2001, it would seem appropriate to provide the public with more than 45 days to review such a voluminous document. The City requests an extended public review and comment period for the EIS.

Thank you in advance for reviewing and responding to our questions and requests for further information so the City can adequately determine the scope of anticipated environmental impacts to the Silver Strand corridor associated with the Navy's Silver Strand Training Complex. The City also appreciates your serious consideration of an extended period of time to review the document to allow for full public participation and review of this important study.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Benson", with a long horizontal flourish extending to the right.

James F. Benson  
Interim City Manager

JFB/mlc

Attachment: List of issues to be addressed in the draft EIS

cc: Mayor and Councilmembers  
Tom Ritter, Assistant City Manager  
Rachel Hurst, Director of Community Development  
Ed Walton, Director of Engineering  
Scott Huth, Director of Public Services  
Ann McCaull, Senior Planner

## ATTACHMENT

## LIST OF ISSUES TO BE ADDRESSED IN THE DRAFT EIS

1. The draft EIS acknowledges there will be new squadrons, flight patterns and helicopter training occurring at SSTC. The draft EIS fails to identify the location points where the helicopters will take off and the paths of travel to and from the training areas and any increased public safety risks to residents, school populations, and beach users due to the increased amount of flight activity as well as the increased frequency and noise associated with the increased frequency of activity. The draft EIS should address, quantify, and analyze these issues.
2. Section 3.1-12 notes that 80% of flight occurs over the water and aircraft are required to approach and depart from training activities over the water. Is there a map that shows this flight pattern? What is the flight pattern for the remaining 20% including both approach and departure locations? The draft EIS should address, quantify, and analyze these issues.
3. Section 3.1.2.3.1 notes a new activity, N8 Tactical Recovery of Aircraft and Personnel, would involve landing or hovering of helicopters at SSTC-S at nighttime. Where exactly within the southern area of the training complex would this activity occur? How many aircraft, how frequent and for what duration would this occur?
4. Section 3.6-26 discusses Acoustic Impacts associated with the Preferred Alternative. The draft EIS notes sound levels will remain the same but training events producing sound would increase in frequency. No mitigation is proposed. The draft EIS needs to analyze the noise impacts of the increased number of training events both individually and cumulatively.
5. Section 3.6.2.3.2 notes existing aircraft noise is increasing from 778 helicopter sorties per year to 2,220 per year representing a 185% increase. What is the duration and frequency of the sorties? The Amphibious Raid activity is noted to represent the most intense aircraft sound event at SSTC and the frequency of the events would increase to 18 per year. What is the duration of these events? It is not clear from the tables and maps where these activities would be located. An additional activity noted as Tactical Recovery of Aircraft and Personnel (TRAP) notes 5 helicopters could be employed and the activity would occur at night, lasting one to two hours. It does not appear to be identified in Table 2-2 and it is not clear where this activity would occur. Cumulatively, the analyses conclude the types of activities described have occurred over time and the only difference is the frequency and no mitigation is required. If the number of activities, duration of activities, and type of activities increases, the amount of noise will unquestionably increase representing significant changes in noise levels to the area and should be mitigated.
6. How do the planned flight paths for new helicopters (to and from SSTC) align with the current Airport Land Use Study for the military bases? How will these planned/proposed paths affect a study that is currently underway for the NAB and those existing uses within the project boundary?

7. The draft EIS does not identify the flight path and accident potential zones (APZs) areas for the helicopters and aircraft in transit to SSTC. The document references NAVFAC P-80.3 indicating APZ is not required. Provide documentation from the referenced document justify/explaining why none is required.

8. The Acoustic Environmental analysis notes there will be an increase in the frequency of aircraft; increase in amphibious vehicle training; increase with ELCAs and associated pile driving; increase in Breacher activities and use of shotgun blasts. The draft EIS notes while all of these activities will be generating increased noise levels, only the frequency of activity will be increasing; therefore, no mitigation is proposed. Mitigation is identified as the Navy's ongoing process and procedures to notify adjoining agencies/facilities when disturbances will occur. Public notification that noise impacts will occur does not mitigate the noise impacts experienced by students and school officials, residents and tourists.

9. Section 2.3, page 2-27 discusses Alternative 1 as the Navy's Preferred Alternative and is "designed to meet Navy and Department of Defense (DOD) current and near-term operational training requirements." How is "near-term" operational training requirements defined? Is there an estimate for how long these expanded activities, increased training tempos and operations will meet the 100% training needs as identified in the draft EIS? Is this for a period of 5 years, 10 years or longer? If some of the "new" activities and training operations need to be expanded in the future to meet Navy mission requirements, will a supplemental Environmental Assessment be completed?

10. The Purpose and Need section discusses "increased training tempo" from current baseline conditions. This needs to be better defined to be properly analyzed. For example, the baseline tempo of 3,926 activities indicates it is not associated with personnel. The Preferred Alternative indicates an increase in activities approximately 41% to 5,543 activities but there are no associated man hours to correspond to these activities. The draft EIS should be revised to address/clarify increased training tempo of approximately 41% without increased personnel.

11. Section ES 1.3.1 documents the increase of Naval Special Warfare personnel operating on NAB Coronado, equivalent to one additional Sea, Air and Land team. It also documents the realignment of the Explosive Ordnance Disposal groups, which has necessitated expanded use of the Southwest Region training venue, including SSTC. The Marine Corps will also increase the number of personnel cycling through training programs at SSTC. Finally, it discusses new platform, training equipment, and service life extension programs to keep up with current needs. All of the needs correspond to additional personnel training at SSTC but they are not quantified nor are their impacts on the community accounted for in the draft EIS. In particular, what are the impacts to daily traffic as these new personnel travel to and from NBC to participate in this training?

12. The Traffic and Circulation section notes there will be an increase in trips resulting from increased activities and operations; however, it will be less than 2% of the total daily traffic generated. The draft EIS acknowledges Gates 1 & 2 currently experience unacceptable Level of Service. The draft EIS notes that since the increased activity will amount to 2% of traffic, no mitigation is proposed. Any further decrease to the level of service to these intersections should be analyzed and addressed.

13. Section 4.3.14, Page 4-22 Transportation and Circulation cumulative analysis does not adequately analyze the impacts associated with the “increased tempo” of activities proposed with SSTC Preferred Alternative. Where are the estimated traffic generation rates to arrive at the conclusion of a less than 2% increase in traffic? How can an argument be made that since the number of employed are not increasing, therefore, there will be no increase in traffic? What about the new and expanded activities and training planned for SSTC? Where are these “employees” coming from when some of the activities are “new” to SSTC? The document should analyze all the trips associated with the increased training activities including commuter access to/from SSTC/NBC.

14. Table 2.1, Baseline and Proposed Tempos for SSTC Training Activities, identifies 78 training activities along with duration and number of events per year. The document should relate the activities to number of personnel. How many people are training under the baseline and how many will be training under the proposed activities?

15. Table 2-2, Proposed New Training Activities at SSTC for Alternatives 1 and 2, identifies 11 new activities. The document should relate the new activities to the number of personnel. How many additional people will be trained under the new activities compared to the baseline?

16. The draft EIS notes baseline activities will increase from 3,926 activities to 5,343. Many of the new activities are a result of new helicopter training activities such as 200 new mine hunting; 48 new helicopter mine detection; 100 helicopter activity; 48 MH-60s helicopters; 124-154 helicopter rope training; and 109 to 198 Close Quarter Combat with helicopter use. Amphibious Raise (with possible helicopter use) will expand from 6 days a year to 54 activities a year. Perhaps even more significantly, CRRC OTB Insertions and Pyrotechnics will increase from 4 day events approximately 52 times a year to 86 times a year. This change results in almost 365 days per year this activity will occur. The draft EIS does not analyze the cumulative impact of the entire new helicopter activities will have on the air when cumulatively combined. The draft EIS does not contain a section where analysis of combined activities along SSTC can be visualized and analyzed in terms of cumulative activities and noise.

17. Section 3.3.2.1.1, Emissions Evaluation Methodology, discusses emissions from ground vehicles only and should include vehicles involved in the training activities. It should also include all additional vehicles trips to get the personnel to the training (commuter trips).

18. Transportation and Circulation, Page 3.14-4 last paragraph states: The Rendova Road (Gate 1) and Tarawa Road (Gate 2) intersections operate at LOS E during the busiest morning commute hours and Tarawa again operates at LOS E during the busiest afternoon commute hour. This conflicts with Table 3.14-3 which has a LOS F for Tarawa in both a.m. and p.m. peak hours.

19. Transportation and Circulation Page 3.14-5, second paragraph states: The City of Coronado is currently in the process of analyzing traffic conditions for SR-75 to determine the best long-term traffic solutions for the community. This project is actually the SR 75/282 Transportation Corridor Project which is analyzing traffic conditions along the corridor between the bridge and NASNI, not SR-75 adjacent to SSTC.

20. Section 3.14.2.3.1 Ground Transportation indicates under Alternative 1, military training activities are estimated to generate approximately 336 ADTs. The draft EIS should analyze all trips generated from the increased activities and increased training tempo.
21. 3.14-5 Summary of Effects section: Silver Strand at Rendova Road and Silver Strand at Tarawa are signalized intersections with LOS E or worse. All additional traffic generated by the increased activity should be analyzed and the amount of delay calculated in accordance with the SANTEC/ITE Guidelines for the San Diego Region. In addition, there is no mention of the number of pedestrian crossings between the bay side and ocean side of NAB, which affects the signal capacity and causes delay. The document should quantify the number of pedestrian trips across SR-75 that occur and how many more would be expected under Alternatives 1 and 2.
22. 5.13 Transportation and Circulation section does not propose or identify mitigation for the increased transportation and circulation in the proposed alternatives.
23. List of Preparers: A Traffic Engineer was not identified under the list of preparers. Who analyzed the Transportation and Circulation sections?
24. The draft EIS does not identify the potential impacts to the intersections due to increased foot and boat traffic from bay side to beach side. Do the increased activities warrant re-evaluation of an underpass or overpass?
25. Section 5-5 refers to mitigation for underwater detonations and security precautions. When planned activities are underway, will areas of the public beach/water be cordoned off?
26. Section 5-19 notes there is an interpretive sign planned for the bike trail near south Delta Beach. This sign would be located in the Scenic Highway Corridor zone and should be designed to be consistent with the overall Silver Strand Enhancement plan.
27. Table 4-1, Page 4-2 notes future planned improvements for the Navy Lodge. It notes four existing buildings and several smaller structures will be demolished and will be replaced with a lodge building to increase room capacity as well as new recreational facilities, parking, retail shops and a restaurant. What is the approximate square footage of this new facility and net increase in units? Are these additional lodge units to be temporary "resort" type facilities or housing for living purposes as a BOQ or BEQ? Are these additional housing units being proposed to accommodate expanded military operations such as the two new commands at NASNI? The draft EIS further notes in this section that along with the commands, there will be construction of a pier, boat ramp, and several buildings. Where is this project being located and could it also serve as a potential pier/boat ramp to re-instate the ferry service to NASNI that was recently discontinued?
28. Table 4-1, Page 4-3 briefly discusses the U.S. Navy Lighterage project, which involves construction of a waterfront command and control facility for amphibious construction Battalion One facilities to support the introduction of the improved Navy Lighterage System at NBC. The draft EIS does not describe this new system at NBC and should describe the activities associated with the system.

29. Section 4.3.16, Page 4-23 Public Health and Safety cumulative analysis notes there will be momentary disruptions in communication to nearby residences and schools. The draft EIS does not identify how frequently and for what duration. The draft EIS identifies impacts associated with the expanded activities planned for SSTC individually; however, it fails to cumulatively analyze the activities combined to determine the length and period of all activities combined on the residential and school areas. For example, it appears there will be full time operation of the beach lanes at SSTC almost every day throughout the year. Where have those activities – length, time, duration – been analyzed?

30. Table 3-1- states Coronado Beach is the only public beach in Coronado. This statement is incorrect. The Silver Strand State Beach is also located within the City of Coronado.

31. Section 3.6.2.3.3 indicates current Breacher Training operations are 14/day when an event occurs and an event occurs 20 times per year. The draft EIS notes operations will increase to 1,400 annually. How does the increase in activity affect the number of events per year and number per day so an assessment can be made regarding the degree of change on a daily, weekly, or monthly basis?

32. Section 3.6.2.3.4 describes Amphibious Training operations increasing landings from 10,000 to 13,800 per year and LCAC activities (generating the most noise) will increase from 8 to 40 per year. The draft EIS identifies LCAC landings along with associated pile driving that occurs for at least 1 to 2 hours generating decibel levels of 74 to 104, 100' away. The draft EIS notes this activity has the potential to generate the largest number of increased complaints regarding noise and activity levels, particularly due to the proximity of the activity to Silver Strand housing and Silver Strand School. The draft EIS does not propose any mitigation, however, notes the training could result in sleep and communication disturbances. If the draft EIS acknowledges impacts, why aren't mitigation measures proposed? To state the Navy will advise surrounding agencies when potential impacts may occur is simply public notification and does not mitigate the related noise impacts. For example, could changes be made to the school to improve sound attenuation?

33. The draft EIS does not identify the entire Silver Strand as a State Scenic Highway and the Silver Strand (bay to ocean) as a Scenic Highway Overlay zone. The draft EIS should address the potential visual and environmental impacts associated with any new large equipment or improvements that would be visible along the Silver Strand. The City and Navy have worked cooperatively in the past to eliminate unnecessary signs, dilapidated training equipment, and vertical obstructions along the Silver Strand to improve the overall aesthetic improvement to the Silver Strand and assist with Least Tern and Snowy Plover preservation efforts.

34. The draft EIS proposes to institute beach sand berming activities, which negatively impacts the scenic highway and the public use of view corridors. For example, the berming of sand on SSTC has directly impacted the public in the past by blocking sunlight to the Solstice Clock feature in Natures Bridge (Silver Strand's Bayside Nature Trail). In December 2009, at the request of a group of citizens that meet for the winter solstice at this site, the City requested the Navy to lower the berm on December 21 so the sunlight could shine through to the Solstice Clock. The Navy was unable to accommodate this request but did not preclude this request from being accommodated in the future. The draft EIS should address how berming activities will be minimized to avoid the conflicts described in this example as well as other potential berming conflicts along the Strand. This could be addressed through an action plan that identifies how

City and Navy communication will be coordinated and improved to ensure present and future berming activities along the Strand do not negatively impact the Scenic Highway.

35. Several years ago, the Navy bermed up areas on the ocean side of NAB. This activity affected beach sand deposits in front of the Coronado Shores. It has also appeared to accelerate beach erosion at the south end of the Shores. The draft EIS does not address sand movement for training operations and impacts.

36. Figure ES-1 shows anchorage areas directly offshore of Coronado's Central Beach area, which are a direct encroachment into the public's view corridor. There are ample anchorage areas adjacent to Federal (US Navy) property; therefore, there is no necessity for anchorage areas for military craft as shown.

37. Section 3.5.243 of the draft EIS indicates that, if all increased training activities were performed individually, there would be an 85% increase in the amount of time that portions of the bay and/or ocean would be closed to public use. The report also points out that if activities occur simultaneously, that percentage would decrease. Even with that, it is not clear how the public interest is served by this monopolization of ocean and bay use by the military. This proposed increase would have a definite negative impact on public use of these natural resources.

38. The City's beaches are already impacted by trash and other debris from a variety of sources. The draft EIS does not provide for any programs to mitigate the effects of the expanded programs adding to this trash and debris. The City is not aware of any current, ongoing program to clean the Navy's beach areas. The Navy's trash and debris, as well as that from other sources, accumulates on Navy property; tidal action and currents then deposit this trash and debris on public beaches. Expanded training activities will not only disturb buried trash and debris, releasing it into the environment; expanded water-based activities will re-suspend particulate debris deposited on the ocean bed. In summary, expanded training activities will likely lead to an increase in the amount of trash and other debris accumulating on Coronado's beaches in the area. The draft EIS should be revised to address these issues and mitigation.

39. The draft EIS refers to OPNAVINST 5090.1 in several locations; however, this document was not provided as an attachment. Some sections of the report indicate that the discharge of bilge water and grey water is not allowed; other sections of the report seem to indicate that this discharge is allowed under certain conditions. Discharge of grey water and/or bilge water from any Navy vessel in the training area should be prohibited for any reason.

40. The draft EIS describes training activities, which would include the creation of salt water ponds for temperature training. This ponded water would experience human contact for extended periods of time. Any ponded water used for this type of training should be tested to ensure that it meets established water quality standards prior to release back to the ocean and/or bay. The draft EIS should be revised to address this issue.

41. The draft EIS should further discuss, explain and analyze the permit for reverse osmosis water purification and unit discharge into the Bay and Ocean as discussed in Chapter 6 of the draft EIS.

42. In the course of describing training activities, the draft EIS indicated that some running exercises would be performed with military working dogs traversing beach areas. Dogs are prohibited on the City's beaches, except for the area designated as Dog Beach, located at the northwest end of the City's Central Beach, near the Air Station's Ocean Boulevard gate.

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## E.2.13 Department of the Interior

Representing: Organization

Organization: Department of the Interior

Name: Patricia Port

Date: 3/10/2010 12:58:03PM

Subject: Other

Comment: Please disregard the Department of the Interior's no comment letter sent electronically through this website on Monday, March 8, 2010. Please consider comments from the U.S. Fish and Wildlife Service, which will be sent in hard copy format to the suggested address.

## E.2.14 Department of Transportation

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

### DEPARTMENT OF TRANSPORTATION

DISTRICT 11  
4050 Taylor St., MS 240  
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*Flex your power!  
Be energy efficient!*

March 9, 2010

11-SD-75  
PM Var

Mr. Kent Randall  
Naval Facilities Engineering Command, Southwest  
Silver Strand Training Complex  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

RE: Silver Strand Training Complex Project - DEIS

Dear Mr. Randall:

The California Department of Transportation (Caltrans) appreciates the opportunity to have reviewed the Draft Environmental Impact Statement (DEIS) for the Silver Strand Training Complex Project located along State Route 75 (SR-75) south of the City of Coronado. Caltrans has the following comments:

The AM peak Intersection Volumes at Rendova Road is 3,328 with level of service (LOS) E. The AM peak and PM peak Intersection Volumes at Tarawa Road are 3,284 and 3,406 with LOS F. These two intersections LOS are exceeding Caltrans threshold to maintain a target LOS between "C" and "D". Any trips added to an intersection already operating at LOS F typically reduces the intersection measure of effectiveness (MOE operating capacity). A corridor segment or intersection currently operating at LOS F has reached its maximum effective operating capacity. Any additional trips added without maintaining the existing MOE's would further degrade the operational function and does not allow an intersection or segment to continue to operate within its capacity, as the segment or intersection has failed. Significant delays are expected at an intersection or roadway segment operating at LOS F. This should be documented as such in the EIS. The above intersections should also be analyzed for Existing plus Project to specify the significance of traffic generated by Marine activities additional trips.

On page 3.14-4 to 3.14-5, the Rendova Road intersection operates at LOS E during the AM peak hour; and Tarawa Road intersection operates at LOS F for both AM peak and PM peak hour. Please revise.

On page 3.14-5, section 3.14.1.4.2 Traffic volumes along Palm Avenue between 2005 and 2006 have decreased by 39%. The same applies for Table 3.14-4. Please revise.

*"Caltrans improves mobility across California"*

Mr. Kent Randall  
March 9, 2010  
Page 2

The Traffic Impact Analysis (TIA) within the EIS did not address potential increase (or decrease) in pedestrian related trips at the analyzed intersections. The TIA should address the potential impacts that may occur as a result of any increase in pedestrian trips from Oceanside training to bayside training etc. Increased pedestrian trips can have a substantial impact on intersection operations, as the existing pedestrian crossing time may not be adequate to handle additional trips and may require the pedestrian crossing phase time to be increased to meet the added demand, thus lowering the overall capacity of intersections where this may occur. This would be especially important to know for the peak periods analyzed within the TIA.

Any reduction in pedestrian trips during the peak periods that may increase the capacity of any of the signalized intersections analyzed, such as new eating facilities on the beach side training facility, which would reduce the need for trips at the analyzed intersections would be helpful to note as well.

Based on the inclusion of these revisions to the EIS, Caltrans has no further comments.

If you have any questions or require further information, please contact Christian Bushong at (619) 688-2510 or [Christian.Bushong@dot.ca.gov](mailto:Christian.Bushong@dot.ca.gov).

Sincerely,



JACOB M. ARMSTRONG, Chief  
Development Review Branch

*"Caltrans improves mobility across California"*

**E.2.15 United States Environmental Protection Agency, Region IX****UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX****75 Hawthorne Street  
San Francisco, CA 94105  
3/09/2010**

Mr. Kent Randall  
Naval Facilities Engineering Command, Southwest  
Code OPME  
2730 McKean St. Bldg. 291  
San Diego, CA 92136-5198

Subject: Silver Strand Training Complex, Draft Environmental Impact  
San Diego, CA (CEQ # 20100016)

Dear Mr. Randall:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA acknowledges the importance of military training, and the challenge of balancing training programs with environmental requirements. EPA compliments the Navy on its role in aiding the recovery of the least terns.

We have rated the Draft Environmental Impact Statement (DEIS) as Environmental Concerns – Insufficient Information (EC-2) (see enclosed “*Summary of Rating Definitions*”). We are concerned about the project’s impacts on water resources and biological resources, and about the need for waste minimization. We also request clarification of the baseline training tempo. Additional information about our concerns is provided in the enclosed detailed comments.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one (1) hard copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Tom Kelly, the lead reviewer for this project. Tom can be reached at (415) 972-3852 or [kelly.thomasp@epa.gov](mailto:kelly.thomasp@epa.gov).

Sincerely,

*Tom Kelly*  
for Kathleen M. Goforth, Manager  
Environmental Review Office  
Communities and Ecosystems Division

Enclosed: EPA Detailed Comments  
EPA Ratings Summary

cc: Sandy Vissman, U.S. Fish and Wildlife Service

**EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT  
(DEIS) FOR SILVER STRAND TRAINING COMPLEX, SAN DIEGO COUNTY, CA, MARCH  
2010**

**Water Resources**

*Vernal Pools*

As stated in EPA's website<sup>1</sup>, "[m]ore than 90% of California's vernal pools have already been lost. Great efforts are being made to protect the remaining vernal pools, as their disappearance marks the loss of rare and important habitat and some of the associated plant and animal species as well." At the Silver Strand Training Complex – South (SSTC-S), the vernal pools cover 3.2 acres in total (Table 3.11-1). Additionally, many contain endangered San Diego fairy shrimp "found in 11 of 25 vernal pools and salt marshes surveyed" (page 3.11-12).

In the preferred alternative, the DEIS states on page ES-10, "[t]he Navy would allow limited training involving foot traffic, but not vehicle traffic, in the vernal pools when vernal pool conditions are determined to be dry." The DEIS also states in Table 3.11-4, "[d]ry conditions would be determined by a qualified person overseen by a NBC [Naval Base Coronado] Botanist or Wildlife Biologist." While foot traffic in the vernal pools when the soil is dry and hard is unlikely to damage fairy shrimp, determining when the pools are dry enough for foot traffic is complex.

**Recommendation:**

EPA recommends the Navy work with U.S. Fish and Wildlife Service to identify the highest quality vernal pools, and fence those to minimize impacts from training.

Alternatively, EPA suggests

- the FEIS commit to an inspection of vernal pools by a wildlife biologist, prior to upland training at beach Purple 2, or
- the FEIS list the factors that will be used to determine the vernal pools are dry enough to withstand foot traffic.

*Sediment Quality*

The DEIS states on page 3.5-14, "[r]ecent sediment sampling in the San Diego Bay near SSTC-N indicates – while concentrations of some contaminants are elevated above background levels – no contaminants were present at concentrations which would adversely affect marine organisms (Port of San Diego 2002)." EPA encourages a fuller discussion of sediment sampling results near SSTC-N and any screening levels used to

<sup>1</sup> <http://www.epa.gov/wetlands/types/vernal.html>

determine that no contaminants were present at concentrations of concern. The purpose of the sediment sampling in the report cited (San Diego Harbor Deepening EIS/EIR, USACOE, November 25, 2002) most likely was intended to characterize the quality of the sediment to be dredged, and may not have specifically addressed the sediment at SSTC-N. Even more so than dredging, underwater explosions are likely to make contaminated sediments bioavailable to fish and marine mammals.

**Recommendation:**

The FEIS should provide additional discussions of sediment sampling at SSTC-N, including a brief description of the number of samples, depth of sampling and contaminant concentrations.

**Biological Resources**

*Least Terns*

The DEIS discusses physical training for groups averaging 30 – 150 people (Table 2-1, page 2-24), and includes that “trainees may occasionally have a military working dog participate in the physical conditioning.” Page 3.11-39 also clarifies that military working dogs “are typically on the hard packed sand (SSTC-S) or sand road (SSTC-N), they can also be on the soft packed sand in both areas.” While federal endangered least terns may have acclimated to the presence of humans nearby, barking dogs in nesting areas does not seem prudent, particularly when exercise in the nearby hard packed sand would be much less intrusive.

**Recommendation:**

The FEIS should include a mitigation measure that avoids conditioning military working dogs in least tern nesting areas (i.e. the soft packed sand of Blue 2, Orange 1 and Orange 2).

**Waste Minimization**

EPA recognizes the Naval Region Southwest’s commitment to sustainability, including renewable energy, water conservation, green buildings and more. We commend the Navy for “pumping seawater through its Offshore Petroleum Discharge System during training, instead of using petroleum products.” In comparison, the DEIS does not explain whether a high level of scrutiny has been applied to the explosive training exercises, although it does identify potential munitions constituents of concern and explosives residue (on page 3.4-10 and 11). EPA acknowledges that in many instances the success of training exercise may not be judged without using the actual amount of explosive also used in field conditions, however, that may not be the case for all explosives training exercises.

**Recommendation:**

The FEIS should assess the potential to reduce explosive charges in meeting its training needs.

**Clarification of Baseline Training Tempo**

Various sections of the DEIS provide information on baseline training tempo, including Table 2-1. EPA encourages a more thorough discussion of the development of the baseline training tempo, to clarify the concept. The FEIS should, for example, explain whether the values in Table 2-1 represent the amount of training conducted in a specific year or the amount of training that could be conducted given the current restrictions on training. Where the baseline training tempo is not reflective of recent training activities, EPA suggests the FEIS include a comparison with recent training activities. This will foster better understanding of the FEIS. EPA is not suggesting additional factors need to be used for comparison throughout the FEIS, only that it should link training tempo to recent levels of training at SSTC.

## SUMMARY OF EPA RATING DEFINITIONS\*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

### ENVIRONMENTAL IMPACT OF THE ACTION

#### *"LO" (Lack of Objections)*

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### *"EC" (Environmental Concerns)*

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

#### *"EO" (Environmental Objections)*

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### *"EU" (Environmentally Unsatisfactory)*

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

### ADEQUACY OF THE IMPACT STATEMENT

#### *"Category 1" (Adequate)*

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### *"Category 2" (Insufficient Information)*

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### *"Category 3" (Inadequate)*

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

## E.2.16 Federal Emergency Management Agency, Region IX

U.S. Department of Homeland Security  
FEMA Region IX  
1111 Broadway, Suite 1200  
Oakland, CA. 94607-4052



# FEMA

March 8, 2010

Kent Randall – Silver Strand Training Complex EIS  
Naval Facilities Engineering Command, Southwest  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, California 92132

Dear Mr. Randall:

This is in response to your request for comments on the Silver Strand Training Complex Environmental Impact Statement in the County of San Diego, Cities of Coronado and Imperial Beach, California.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County of San Diego (Community Number 060284), and Cities of Coronado (Community Number 060287) and Imperial Beach (Community Number 060291), Maps revised September 29, 2006. Please note that the Cities of Coronado and Imperial Beach, San Diego County, California are participants in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

[www.fema.gov](http://www.fema.gov)

Kent Randall  
Page 2  
March 8, 2010

- All buildings constructed within a coastal high hazard area, (any of the “V” Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA’s Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

**Please Note:**

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community’s floodplain manager for more information on local floodplain management building requirements. The Coronado floodplain manager can be reached by calling Gary Fausett, Senior Building Inspector, at (619) 522-7326. The Imperial Beach floodplain manager can be reached by calling Edward Wilczak, Building Official, at (619) 628-1357. The San Diego County floodplain manager can be reached by calling Cid Tesoro, Flood Control District Manager, at (858) 694-3672.

If you have any questions or concerns, please do not hesitate to call Michael Hornick of the Mitigation staff at (510) 627-7260.

Sincerely,



Gregor Blackburn, CFM, Branch Chief  
Floodplain Management and Insurance Branch

cc:

Gary Fausett, Senior Building Inspector, City of Coronado  
Edward Wilczak, Building Official, City of Imperial Beach  
Cid Tesoro, Flood Control District Manager, San Diego County  
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources,  
Southern Region Office  
Michael Hornick, Floodplanner, CFM, DHS/FEMA Region IX  
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

[www.fema.gov](http://www.fema.gov)

**E.2.17 San Diego County Archaeological Society, Inc.****San Diego County Archaeological Society, Inc.**

Environmental Review Committee

4 March 2010

To: Mr. Kent Randall  
 Naval Facilities Engineering Command, Southwest  
 Building 1, 5th Floor  
 1220 Pacific Highway  
 San Diego, California 92132

Subject: Draft Environmental Impact Statement  
 Silver Strand Training Complex

Dear Mr. Randall:

I have reviewed the cultural resources aspects of the subject DEIS on behalf of this committee of the San Diego County Archaeological Society.

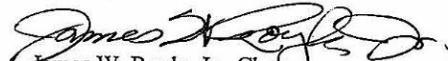
Based on the information contained in the DEIS, while we appreciate the actions the Navy has taken to protect cultural resources in the Silver Strand Training Complex, we have the following comments:

1. The DEIS describes actions the Navy routinely takes to avoid significant impacts to cultural resources, such as notification of restrictions prior to activities. What actions does the Navy take to audit the effectiveness of impact avoidance? Is there a periodic monitoring or inspection program, with provision for remedial action should any problems be identified?
2. The DEIS considers potential impacts to ground-disturbing activities "in the immediate area of an archaeological site" (see Section 3.13.2). It does not address the possibility of such activities impacting buried sites. A monitoring program is warranted for areas where previously-undisturbed subsurface areas will be subjected to excavation, grading or similar disturbances. Both archaeological and Native American monitors need to be part of such a monitoring program.
3. Please explain where the collections from previous archaeological investigations on the SSTC are curated. An inspection of the listing of curated collections at the San Diego Archaeological Center identified none of the sites listed (other than an apparent error for SDI-13968, which is listed for a site inventory project on Camp Pendleton). Are the collections curated at another facility meeting the requirements of 36CFR79? If not, what actions will be taken to bring their curation status into compliance with 36CFR79?

P.O. Box 81106 • San Diego, CA 92138-1106 • (858) 538-0935

SDCAS appreciates the opportunity to participate in the navy's environmental review process for this important project.

Sincerely,

  
James W. Royle, Jr., Chairperson  
Environmental Review Committee

cc: SDCAS President  
File

P.O. Box 81106 • San Diego, CA 92138-1106 • (858) 538-0935

## E.2.18 San Diego Audubon Society



March 30, 2010

Naval Facilities Engineering Command, Southwest  
 Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
 1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
 San Diego, CA 92132

Via email: [tory.randall@navy.mil](mailto:tory.randall@navy.mil)

Dear Mr. Randall:

SUBJECT: Silver Strand Training Complex Environmental Impact Statement dated January 2010

Please withdraw the comment letter that we submitted on March 9, 2010, and replace it with this letter. We appreciate the extension of time for the comments on this EIS.

The San Diego Audubon Society is very concerned with the proposed project. We greatly appreciate the current efforts of the Navy to protect and enhance the safe nesting of California Least Terns and Western Snowy Plovers on the Silver Strand. Section 5.11.1. is a very interesting history of Navy environmental responsibility and leadership. We also appreciate the expanded training needs for the Navy because of our Nation's current high level of military activity. However, we think that the plan needs to be more protective than the current Alternative 1 or 2. Therefore we support the No Project alternative unless Alternate 1 can be improved substantially. We strongly urge that Alternative 2 not be selected because of its large and irresponsible impact on least terns and snowy plovers. The San Diego Audubon Society also supports the Bay Council letter to which we are a cosigner.

### IMPACTS ON LEAST TERNS

The population of Least Terns has risen substantially over the last 15 years, as the EIS shows. But, the reproduction of Least Terns has generally been declining over the last decade as the EIS also shows. This suggests that the species is not doing nearly as well as it looks. It is also thought that the average age of the birds is increasing, which could reduce future reproductive success. This is clearly not a good time to increase the take of the species, particularly when that take is avoidable. We will be more specific in the following subheadings.

### CUMULATIVE IMPACTS NOT ADDRESSED, LEAST TERNS

The EIS provided a long list of likely activities for which the cumulative impacts have been addressed. We are concerned that several very relevant activities were not addressed that, when combined with Alternative 1 or 2 could help put the recovery, and perhaps even the survival of the species in jeopardy.

The U.S. Fish and Wildlife Service has proposed downlisting the least terns from Endangered to Threatened. This would reduce the priority for funds, for priority for other resources such as locations for new nesting areas, negotiating site management agreements, predator management, protection and enhancement of the fish needed for foraging, research, monitoring, planning, analysis, site maintenance, etc. This reduction in resources and priorities will take a toll on the species, in both predictable and unpredictable ways.

Global Climate Change appears to be making the quantity and timing of the supply of small fish for least tern consumption more variable and more uncertain. This affects the likelihood that chicks will survive. Changes are happening very quickly which could leave the entire population more vulnerable.

858-273-7800 • 4010 Morena Blvd., Suite 100, San Diego, CA 92117 • Fax 858-273-7801 • [www.sandiegoaudubon.org](http://www.sandiegoaudubon.org)

The impacts of Gull-bill terns on tern reproductive have been significant and appear to be increasing. There appears to be no real progress toward identifying how to manage the two species to assure the recovery of least terns. This lack of resolution is likely to result in a large and unmanaged take of least terns for at least several years while regulations are developed, reviewed, and finally implemented.

The Recovery Plan for least terns is almost three decades old and is based on outdated information. As a result, there is no effective comprehensive and broadly accepted plan for the recovery of least terns. This deficiency in planning and management means that there is no valid way to conclude that the additional take proposed by Alternatives 1 or 2 will not help put the species in jeopardy.

We urge that the EIS acknowledge each of the additional cumulative impacts mentioned above and incorporate their effects into its analysis.

#### SPECIES VIABILITY ANALYSIS, LEAST TERNS

The Species Viability Analysis is based on reproduction rates measured in 1981 to 1984, according to page 3.12-21. At this time the productivity was 0.62 fledgling per nest in good years and 0.27 for years dominated by El Nino/Southern Oscillation (ENSO). The ENSO influence was expected about one out of seven years.

According to a figure in the handout from the public presentation, in the last 8, the good years have had productivity around 0.15 for the good years and 0.05 for the bad ones. It appears that we have had 8 bad years in a row vs. the one bad year in seven anticipated in the Species Viability Analysis.

As mentioned above the Species Viability analysis assumes one ENSO year for every 7 normal years. However, some climate models now suggest that with global warming the average may become more like the ENSO state which will make least tern reproduction more difficult.

The model also does not address other trends that could increase the risk to the food supply for least tern recovery such ocean warming, reduced oxygen levels in the ocean, and ocean acidification. Each of these issues suggests that the Species Viability Model is probably wildly optimistic.

We urge that this EIS not conclude that a lower population of least terns will not jeopardize the recovery of the species unless that conclusion can be substantiated with current and relevant data and the best analysis of future trends. Such an analysis should also incorporate the effects of the cumulative impacts listed previously in this letter. Any model used should include the uncertainty range of the input information, the uncertainties of the assumptions the model is based on, how the uncertainties propagate through the model, and the uncertainty of the results. A model that produces a number without clear quantification of the uncertainty of that number will probably be more misleading than useful.

The species viability analysis only appears to address keeping the species from declining to extinction. The purpose of the Endangered Species Act is recovery. This analysis needs to be redirected to identify a population and population growth rate that will lead to a high probability of recovery of CA least terns in a reasonable period of time.

#### IMPACTS ON WESTERN SNOWY PLOVERS

The EIS proposes a maximum number of 22 Snowy Plover nests that will be marked for protection. Other nests, eggs, and chicks will be unmarked. As they are very well camouflaged the destruction of a large number of chicks and eggs appears likely. The EIS fails to provide any analysis to quantify the likely number of unmarked nests, eggs, and chicks in the lanes would be destroyed accidentally. But it concludes that this will not be a significant impact with no data or analysis to support this conclusion.

From 2005 to 2009, Snowy Plover population on the West Coast has declined about 13%. The Recovery Plan emphasizes the need for increased protection of nesting areas to allow recovery.

Backing off on protection of these nests appears to be a significant risk to the viability of this species and directly contradicts the recommendations of the Recovery Plan.

EIS also fails to provide any direct mitigation for the losses of Western Snowy Plovers that will be caused by this project as is required by NEPA. Ironically the protection of these three lanes during nesting season was provided as mitigation for the losses that were anticipated for the other 11 lanes. In view of this, If this project is implemented, we strongly urge that the EIS provide estimates of anticipated losses of WSPs from the training operations on all of the 14 Silver Strand project area and provide adequate mitigation to directly offset those losses in all 14 lanes.

#### **BIOLOGICAL OPINION NOT AVAILABLE**

The Biological Opinion from the US Fish and Wildlife Service will have an important impact on the future of this project. It is inappropriate that the public must review this EIS without seeing the final Biological Opinion for the project. The BO would provide additional information and the opinion of the FWS. It is essential that reviewers be able to review this opinion and its background information and see how the Navy intends to deal with that opinion.

We strongly urge that the DEIS be recirculated for comment after the BO is received, its results are integrated into the project, and the mitigation is identified. This transparency is especially important for this project in view of its large potential impacts on two very important at-risk species. If the public is only allowed to see this information in the FEIS, there will be no formal comment period, and the public will have been denied the intended benefits of the NEPA process.

#### **IMPACT OF NOISE AND DISTURBANCE ON LEAST TERNS AND SNOWY PLOVERS**

We were pleased to see the substantial analysis of the average and peak noise resulting from the project in Section 3.6, ACOUSTIC ENVIRONMENT. But we were extremely disappointed to discover that the noise analysis was only related to "sensitive receptors" of the human kind. The EIS provides no analysis to determine if the increases in average noise or peak noise from the increases in gunfire, flares, and detonation would result in a take, or a reduction of reproductive success, of least terns or snowy plovers. This loss could result from either least terns or snowy plovers being deterred from nesting or abandoning eggs or chicks because of the additional noise, either on the ocean side or the bay side of the Silver Strand.

We strongly urge that the EIS include analysis of the indirect take of chicks and eggs that will result from permanent nest abandonment that is likely to result from the increase in noise, both average and peak. We also urge that the EIS include analysis of the indirect take of chicks and eggs that is likely to result from temporary abandonment that would make the eggs and chicks more vulnerable to death from heat, cold, predators, and starvation.

#### **ALTERNATIVES**

The limited range of alternatives that are presented in the EIS do not provide a reasonable starting point for a productive process to resolve the project's operational and environmental problems. The lack of meaningful alternatives is not consistent with the letter or intent of NEPA. We urge that the EIS alternatives be expanded to lead to a reasonable solution to the Navy's training issues.

The EIS needs to provide an alternative that identifies scheduling efficiencies that will preserve the land portion of blue 2, orange 1, and orange 2 during nesting season. A very large portion of the use of the training area is for physical fitness training which provides considerable opportunities for more efficient use of the area. The EIS's allegation that expanding operations into those three lanes is essential to the mission is not supported by any specific information provided in the EIS.

Many of the missions that are proposed can be accomplished in the water section of the lanes, with virtually no beach access. We urge that the uses of lanes blue 2, orange 1, and orange 2 be limited to those water-only missions during nesting season. Needed access for them could be by boat vs. land. If

emergency access is occasionally needed over the beach, that could be considered valid unavoidable "incidental take." Such an alternative should be developed and analyzed.

We also urge that an alternative be analyzed that allows lanes at Camp Pendleton to be used to relieve some of the scheduling pressure on the Silver Strand Beach Lanes without destroying least tern and snowy plover eggs and chicks.

We strongly urge that a set of meaningful alternatives be identified that will address the Navy's training needs in a much more environmentally protective manner. Such an alternative is essential to satisfy the letter and the intent of NEPA.

#### **MITIGATION FOR LEAST TERNS AND SNOWY PLOVERS**

The mitigation measures for the impacts of this project are defined in section 12.4.1: "Develop a site enhancement plan that includes establishing dunes on the windward edges of Delta North and South that would enhance this area for plovers, create a source of sand for the least tern nesting area, and establish a better visual barrier between SR-75 and the nesting colony."

It is not clear what is meant by "Develop a site enhancement plan..." Does that mean that the enhancement would actually be built? How big? When would it be built? Would it be in place and functioning before Alternative 1 or 2 would be implemented? Would it be maintained in perpetuity, or just constructed? This sort of information about the scale and viability of the mitigation should have been a major element of the EIS.

We would appreciate habitat enhancements. But, is it anticipated that these measures would result in an improvement in productivity in terns and plovers that would offset the anticipated direct and indirect take that would result from Alternative 1 or 2? It appears very doubtful that it would. One of the purposes of the EIS is to identify the net impact of the project with the mitigation. This EIS does not identify the impact and it does not identify how much of that impact is offset by the mitigation. It fails to provide the fundamental elements of an EIS.

A better visual barrier between SR-75 and the nesting colony will also mean a better approach path for avian predators to approach the tern colony without being detected. We doubt that will improve the productivity of the colony. Thus it does not appear to have any value as mitigation.

Section 12.4.2 states: "Vehicle patrolling and LARC V operator training will not occur in Red, Blue, or Orange Beach Lanes." How many least terns or snowy plovers will this save? Will the terns and plovers that are saved by this measure survive the other activities that will occur in these lanes under Alternatives 1 and 2? It does not appear that they would. Again, the EIS fails to identify the impacts of this measure, which is one of its main purposes.

The two mitigation measures in the EIS may tend to reduce or offset the take a little, but they do not appear to minimize or to offset the impacts of the Project. If Alternatives 1 or 2 are adopted in spite of their inappropriate impacts, we urge that mitigation be provided that will actually offset the take that results from those actions.

The EIS does not indicate that any accounting will be done to identify how much of the environmental impact of the project is expected to be offset by the mitigation. How would a regulator or decision maker be able to identify how much environmental impact has occurred and how much has been offset by the mitigation over time? We urge that the EIS provide how such an ongoing net impact assessment will be accomplished to facilitate the adaptive management process that is mentioned.

If the project results in a substantial increase in a net take, or if the viability of the terns and plovers begins to diminish, will the project include additional specific mitigation measures to restore protection of the nesting at the three lanes or more to offset the loss? Though adaptive management is suggested, there are no specifics of what is meant by it for this project.

It appears that there are areas in the SSTC South area that could be used to mitigate for the impacts of this project that would be difficult and costly to use for training. We urge that the Final version of this document explore that possibility.

#### **IMPACTS ON DIVING BIRDS**

We appreciate the analysis that was performed relating to the impacts of underwater detonations on diving birds and marine mammals. However, we have not had the resources to verify the data, rationale, or conclusions at this time. We also appreciate the plan to discourage diving birds from the exercise area to prevent injuries or death to them.

#### **PROTECTION OF SENSITIVE PLANT SPECIES**

We do not think that the protection of sensitive dune and upland species proposed by the EIS is adequate, but have not had the resources to comment specifically on them at this time. Volunteer from our chapter spend many hundreds of hours removing invasive vegetation to provide habitat for some of these sensitive plant species. It is disappointing to hear that there will be no protection for these sensitive species in this project.

#### **IMPACTS ON VERNAL POOLS**

Vernal pools are one of the most endangered habitat types in all of California. These pools house a vast array of life forms, including endangered species like the San Diego Fairy Shrimp. Trails running through the vernal pools will disturb the sensitive hydrology of the pools, even if they are only used during the dry season. Cysts can be crushed and damaged even in the dry season. There is no way to predict the damage that could be caused to the vernal pools by crossing through them, even limited to just the dry season. The complex ecology of vernal pools is easily disturbed. We urge that the vernal pools be fenced, and that crossing of vernal pools be prohibited.

Paragraph 3.11.1.1.1, Regulatory Framework, states that the Fish and Wildlife service may issue a Biological Opinion that will state measures that will avoid or minimize the take of any listed species. Table 3.11-3 acknowledges that Alternatives 1 and 2 could adversely impact individual fairy shrimp. The foot traffic will have direct and indirect impact on the vernal pools, even if the foot traffic through the pools is limited to dry seasons. The direct impact is that cysts will be damaged or destroyed by the foot traffic. This is addressed in the EIS. When people walk through an area that contains weedy species, the seeds of the weeds often attach themselves to the shoes, clothes, and equipment of the people. These seeds drop off as the people walk elsewhere, helping to disburse the weed seeds. The invasion of these weeds can have many negative impacts on the pools, including shadowing, increasing evaporation and transpiration rates, degrading the hardpan, etc. There is no way to minimize this impact. Foot traffic could also wear depressions in the containment mounds of the pools eventually changing the hydrology of the pools, preventing the pooling from occurring. Foot traffic could also change land contours separating a pool from its immediate watershed. The EIS does not address any of these significant impacts as it needs to. Clearly these impacts will progressively degrade the pools and will reduce the likelihood that fairy shrimp will be able to recover.

Clearly, allowing foot traffic through the vernal pools will not "minimize" (as stated several times in the EIS, including Table 3.11-3) the take of fairy shrimp in any sense and is a violation of the Endangered Species Act. Limiting the access to foot traffic in dry weather may slightly reduce it, but that is very far from minimizing it in either a legal or practical sense. Pinocchio got a very long nose when he said things like that.

Unfortunately the EIS does not address the conservation of the pools that are not occupied by fairy shrimp. The objective of the Endangered Species Act is Recovery, not just hanging on, or not facilitating the incremental decline of the species. For recovery to occur, a reasonable amount of unoccupied habitat must be protected to accommodate more populations. We urge that a significant portion of unoccupied and restorable pools be protected as well as occupied pools.

The survey for fairy shrimp, on which this document is based, was conducted in 2001 and 2003. A more recent survey is required to know how many pools are currently occupied. We urge that decisions be based on a more timely survey.

We strongly urge that the Project require that all occupied, and all unoccupied pools with a reasonable chance of being restored for future occupation, be fully fenced and that regulations be implemented that forbid entry at any time of the year except for needed maintenance or emergencies. We also urge that the watershed of these pools also be protected so the hydrology of these pools and their necessary watersheds will be viable.

If the Project intends to use vernal pools for foot traffic in spite of the potentially serious impacts, we urge that a multi-year experiment be conducted to assess the impacts on a single test pool, and that all other pools be fully fenced and protected until the potential impacts are fully understood and disclosed.

#### **WHEN THE CURRENT DEMAND FOR BEACH TRAINING RELAXES**

The EIS addresses the need for additional training capability because of the additional deployments to war zones. It does not address returning to the current protection of nesting birds in the three lanes when the need for training is relaxed. If Alternative 1 is adopted, will it be a temporary measure? If Alternative 1 or 2 are implemented, we urge that the EIS contain a commitment that it will revert to the No Project configuration when the need for additional training is reduced in the future.

#### **CONCLUSION**

This document does not satisfy the letter or the intent of NEPA. We strongly urge that the "No Project" Alternative be adopted. However, it appears that a more thoughtful alternative, with real mitigation measures, could be put together that would allow an increase in the training capacity of the Silver Strand while protecting or even enhancing its extremely valuable natural resources. We encourage the Navy to move in that direction in a future Draft of the EIS.

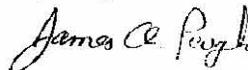
The Navy has had laudable success in its well conceived and well managed mitigation projects for past impacts to terns and plovers on Silver Stand. It is regrettable that this project will seek to significantly dismantle some of that success.

If the Navy decides to move ahead with the current alternatives, we strongly urge that the next Draft quantify what impacts of the project will and will not be offset by the mitigation proposed. We urge that the Navy then identify mitigation that will fully offset the deficit.

We strongly urge that the Species Viability Model used in this Draft be substantially updated or not used. It is not the least bit certain that the current population of least terns is viable in view of our environmental and climate uncertainties. That model clearly does not provide credible justification to the assertion the species will do just fine with a drop of a couple thousand birds.

In case of questions or follow-up, the undersigned can be reached at 619-224-4591 or [peugh@cox.net](mailto:peugh@cox.net).

Respectfully,



James A. Peugh  
Conservation Committee Chair

## E.2.19 San Diego Bay Council



# San Diego Bay Council

*A coalition of San Diego environmental organizations dedicated to protection and restoration of San Diego's Coastal water resources.*

March 30, 2010

**Via e-mail to [tory.randall@navy.mil](mailto:tory.randall@navy.mil)**

Kent Randall  
Navy Technical Rep  
CIV NAVFAC SW,  
1220 Pacific Highway, Building 1, 5th Floor  
San Diego, CA 92132

**Re: Silver Strand Environmental Impact Statement Comments**

Dear Mr. Randall:

The San Diego Bay Council respectfully submits the following comments on the Navy Silver Strand Draft Environmental Impact Statement. The San Diego Bay Council is a coalition of environmental organizations dedicated to the protection and restoration of regional coastal waters in the San Diego. Member organizations, representing 22,000 San Diegans, act through community involvement, regulatory participation, and legal action to ensure the protection and restoration of San Diego Bay, Mission Bay, and the region's coastal waters.

The San Diego Bay Council recognizes that the Navy desires to protect the environment to the fullest extent possible while training the men and women that protect our nation. But the Navy's analysis in the Silver Strand Draft Environmental Impact Statement falls short of showing how the Navy's plan to expand training at the Silver Strand facility will actually protect the environment.

The San Diego Bay Council has serious concerns with the Navy's plan to vastly expand training activities and frequencies at the Silver Strand Training Complex and the hefty toll it will take on the local community and the environment. The Navy's plan has serious long-term negative impacts to water quality, air quality, endangered species, public access to the ocean, bay, and beaches, noise, traffic, and other aspects of quality of life and the environment.

Despite the voluminous Draft Environmental Impact Statement, the Navy has not taken a hard look at the direct, indirect, and cumulative impacts this increased training will have on the community and the environment. The heart of the National Environmental Policy Act is for the Navy to fully analyze and weigh the consequences of each of its possible project alternatives, before selecting one. As part of this process, the Navy must inform members of the public of the burdens the Navy is expecting it—and the environment it uses and enjoys—to bear as a result of the project, before the project is approved and an alternative selected. Here, the Navy's conclusory "analysis" and lack of meaningful alternatives makes NEPA nothing more than a meaningless exercise and deprives the public of the important information it is entitled to under the law.

While the San Diego Bay Council has a multitude of serious concerns about the Navy's proposed training increased activities and frequencies, this letter focuses on only three of our main concerns. We appreciate the extension the Navy granted so that we could submit these comments, but even with the extension, we were unable to delve into all our concerns in detail. We reserve the right to rely on other comments submitted during the public comment process, and we fully adopt here all comments submitted by the San Diego Audubon Society.

Mr. Kent Randall  
Re: Bay Council Comments on Navy Silver Strand Training Complex Draft EIS  
March 30, 2010  
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**I. The Draft EIS Fails to Analyze Anticipated Water Quality Impacts From Increased Smoke Grenades, Flares, and Surface and Underwater Detonations.**

The Navy's proposed ramp-up in training at the Silver Strand Training Complex involves a significant increase in the amount of hazardous ordinance the Navy will be using. For example, the Navy plans to increase the use of smoke grenades and flares from 2,990 pounds to 4,410 pounds. See SSTC DEIS at 3.4-13. The smoke grenades and flares may contain aluminum, magnesium, zinc, strontium, barium, cadmium, nickel, and perchlorates. See SSTC DEIS at 3.4-11. The Draft EIS states that these hazardous pollutants will not cause any problems because "most of them are present in small amounts or low concentrations...." See SSTC DEIS at 3.4-11. The Draft EIS summarily concluded that the "low concentrations of leachable metals" in the No Action Alternatives do not rise to the level of hazardous materials. See SSTC DEIS at 3.4-11.

The Draft EIS then deferred to the "Hazardous Waste" analysis in its water quality impacts analysis. See SSTC DEIS at 3.5-21. Specifically, the Draft EIS states that the "Hazardous Waste" analysis "concluded that only trace amounts of these residues are deposited on the ranges, and they are not expected to affect surrounding biological or physical resources." See SSTC DEIS at 3.5-21. But nowhere does the Navy actually analyze the impact of nearly doubling the amount of pollutants it plans to deposit during training. Instead, the Draft EIS characterizes the pollutants as "trace" amounts and summarily dismisses their potential environmental impact. Even at low concentrations, pollutants can cause serious problems. Because the Navy plans to almost double the amount of pollutants from smoke grenades and flares, it needs to take a hard look at the potential environmental impacts of such a drastic increase in pollution.

Likewise, the Navy plans to double its surface and underwater detonations. See SSTC DEIS at 3.5-22, tbl 3.5-7; 3.5-25, tbl 3.5-8. Yet the Draft EIS assumes there will be no measurable impact on water quality, even though "combustion is less than 100 percent and residues of these hazardous materials may remain in the water and sediment." See SSTC DEIS at 3.5-25. The Draft EIS provides no support or justification for this conclusion.

The Draft EIS also fails to examine the cumulative, long-term impacts of increasing the amount of pollutants released into the ocean and bay. Under NEPA, the Navy must examine the direct, indirect, and cumulative impacts of its proposed action. Here, the Navy has failed to examine the cumulative impacts of doubling the amount of hazardous pollutants it puts into our waters each year. To satisfy its NEPA requirements, the Navy must fully examine the cumulative impacts of increased water pollution.

**II. The Navy's Proposed Plan Will Interfere With Public Access to the Ocean and Bay.**

The Draft EIS states that in total, "training would require closure of portions of the ocean or bay for about 7,500 hours per year" or 312 days per year. See SSTC DEIS at 3.5-25. This would mean that portions of the ocean or bay would be closed "for about 85 percent of the year if no training were conducted currently." See SSTC DEIS at 3.5-25. The Draft EIS suggests that training will "likely overlap in time in an unpredictable way, which would result in multiple areas being closed for a shorter percentage of the year." See SSTC DEIS at 3.5-25.

What the Draft EIS does not address is how many of those hours of closure and training activity would occur during the daylight hours when the public is most likely to use the ocean or bay. If San Diego receives, on average, between seven and ten hours of sunlight per day, that can add up to only around 3,000 hours of sunlight per year.<sup>1</sup> If the Navy plans to close the ocean and bay 7,500 hours per year, it is possible to have the bay and ocean closed during all hours of sunlight in a given year.

<sup>1</sup> Based on San Diego's average conditions, it is estimated that San Diego receives approximately 3,012 hours per year of sunlight. See [http://www.bbc.co.uk/weather/world/city\\_guides/results.shtml?tt=TT001510](http://www.bbc.co.uk/weather/world/city_guides/results.shtml?tt=TT001510). While these

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Disturbingly, the Draft EIS includes—but completely disregards—the City of Imperial Beach's annual estimates of use for shore and nearshore recreation. See SSTC DEIS at 3.5-18. Those estimates show that along Imperial Beach's 3.5 miles of beach front, there were 1.8 million beachgoers, 8,000 beach anglers, and 400 fishing boats providing an estimated 10,000 fishing trips. See SSTC DEIS at 3.5-18. The Draft EIS ignores the data, claiming it is not "quantitative information on the actual use of ocean waters off Imperial Beach, and may not be representative of other beach areas, such as Silver Strand State Beach or Coronado Municipal Beach." See SSTC DEIS at 3.5-18.

By ignoring the best information available on ocean use and recreation, the Draft EIS downplays the impact the proposed project will have on public access to the ocean and bay. The Draft EIS actually suggests that the impact will be negligible because "the size of the water area that would be closed for each training activity is relatively small when compared to the total bay and ocean waters available for the uses described in the *Basin Plan*..." SSTC DEIS at 3.5-26. But the Draft EIS fails to look at the cumulative impact of all the training activities on the waters' designated uses, including recreation. This lack of analysis fails to meet the necessary hard look the National Environmental Policy Act requires.

### **III. The Navy Fails to Take a Hard Look at the Impacts of Increased Training on Endangered Species.**

The Navy's plan to expand training activities and increase training frequency will have negative impacts on several endangered species, including the western snowy plover, the California least tern, and the San Diego fairy shrimp. The San Diego Audubon Society has already articulated several concerns we have about the proposed project's impact on endangered species. Among these concerns are cumulative impacts, lack of meaningful alternatives, noise impacts, mitigation, and lack of analysis of the indirect impacts on chicks and eggs abandoned because of increased training activities. We are also seriously concerned about the decline in the number of least tern fledglings over the past several years. The Navy's analysis fails to address how the increased training will not further exacerbate this serious decline in fledglings. Also, the Navy fails to articulate a well-reasoned, scientifically-based justification for protecting only 22 western snowy plover nests and how that alternative will protect the species. The Navy must take a hard look at the direct, indirect, and cumulative impacts on the western snowy plover and California least tern in order to satisfy its NEPA requirements. Also, the Navy must satisfy its requirements under the Endangered Species Act to protect these endangered birds.

In addition to the snowy plover and the California least tern, the San Diego fairy shrimp also calls Silver Strand Training Complex home. See Silver Strand Training Complex Draft EIS (SSTC Draft EIS) at 3.11-13, Fig. 3.11-4. The San Diego fairy shrimp is among the most endangered species in the country; on a scale of 1-18, with one being the highest, the San Diego fairy shrimp ranks as a "2" on the recovery priority scale. See SSTC Draft EIS at 3.11-12.

So far, the Navy has taken important steps to protect the San Diego fairy shrimp. Under the current management plan, the Navy "restricts all activities from the [vernal] pools at all times." See SSTC Draft EIS at 3.11-33. But now the Navy plans to roll back protections for the San Diego fairy shrimp and "allow foot traffic associated with training activities in vernal pools when conditions are dry." See SSTC Draft EIS at 3.11-41. The Navy has failed to explain why it needs to allow foot traffic in vernal pools that house a critically endangered species or how allowing foot traffic in the pool when the Navy deems the pools "dry" protects the San Diego fairy shrimp. By failing to provide this information and analysis, the Navy has failed to take a hard look at the environmental impacts of its proposed increased training.

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**A. The Navy Fails to Explain Why It Needs to Allow Foot Traffic in the San Diego Fairy Shrimp's Vernal Pools to Meet the Project's Basic Purpose of Improved Training.**

The Navy suggests that it needs to allow foot traffic in the vernal pools because some training activities require space to maneuver. See SSTC Draft EIS at 3.11-43. But the Silver Strand Training Complex—South is 548 acres of land, and the San Diego fairy shrimp has been found in vernal pools taking up only around 4 acres of land. See SSTC Draft EIS at 1-3; 3.11-13, Fig. 3.11-4. The Navy does not explain why walking in those very small, ecologically fragile areas is fundamental to providing better training. Further, the Navy suggests that allowing foot traffic in the vernal pools is "needed" if "other areas are scheduled and no other training areas are available" See SSTC Draft EIS at 3.11-43. In other words, the Navy wants to trade protection of a critically endangered species for added scheduling convenience—for only 11 of the 78 different activities the Navy schedules. See SSTC Draft EIS at 3.11-43, 2-26. The Navy also suggests that walking in the vernal pools might be "needed" for "training diversity" without explaining what "training diversity" walking in the vernal pools would provide—other than trampling a fragile ecosystem.

**B. The Navy Fails to Analyze the Impacts to the San Diego Fairy Shrimp of Allowing Foot Traffic in the Vernal Pools When the Pools are "Dry."**

The Navy proposes to allow people to tramp through the vernal pools the San Diego fairy shrimp call home when a botanist or wildlife biologist determines that the pools are "dry." See SSTC Draft EIS at 3.11-43. The Navy has not analyzed the environmental impacts of this plan to the existing fairy shrimp populations or to the ongoing viability of the fairy shrimp population at Silver Strand Training Complex—South.

**1. The Navy May Determine the Vernal Pools are "Dry" when Fairy Shrimp are Maturing or Adult Shrimp are Present.**

The Navy anticipates that the vernal pools will be deemed "dry" "50 to 95 percent of the year", which could also include "intermittent times during the rainy season, rather than during a defined dry period." See SSTC Draft EIS at 3.11-43. The Draft EIS does not explain how the "qualified person" overseen by a Navy botanist or wildlife biologist will determine when the vernal pools are wet or dry. See SSTC Draft EIS at 3.11-43. The fact the Navy anticipates that the pools will be dry up to 95% of the year is problematic.

The Draft EIS recognizes that "[a]dult San Diego fairy shrimp are observed from January to March" but "in years with early or late rainfall, the hatching period may be extended." See SSTC Draft EIS at 3.11-12. The Navy's 2002 Integrated Natural Resource Management Plan for the Naval Base Coronado (the "2002 Plan") also acknowledges that San Diego fairy shrimp "may appear after late fall, winter, or spring rains sufficiently fill their small, shallow pools (<30 cm deep)" and "[o]nce hatched, the fairy shrimp will mature in 10–20 days... and can live for over a month." See 2002 Plan at 3-76, citing Eriksen and Belk 1999. But the Draft EIS provides no explanation of how the vernal pools could be dry up to 95% of the year when adult shrimp can be observed for at least 25% of the year and possibly in late fall, winter, or spring. Either this means that the Navy anticipates determining the vernal pools are "dry" when there are still adult fairy shrimp present, or the Navy has serious flaws in its analysis.

**2. The Navy Cites No Scientific Evidence That Allowing Foot Traffic Through the Vernal Pools When "Dry" Will Protect the Fairy Shrimp Population.**

The Navy attempts to justify purposely scheduling foot traffic in the vernal pools when the pools are "dry" because "[t]his is the time when the shrimp are least vulnerable because they are encased in hard cysts at or near the soil surface... awaiting the return of wet conditions." See SSTC Draft EIS at 3.11-

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44. But the Navy provides no evidence that the force of foot traffic through the vernal pools will not crush the fairy shrimp cysts.

On the contrary, it is well-settled that human encroachment into San Diego fairy shrimp habitat on foot or on motorized or non-motorized vehicles affects the species by crushing San Diego fairy shrimp cysts. See San Diego Fairy Shrimp 5-Year Review, U.S. Fish and Wildlife Service, 2008 ("5-Year Review") at 28. Scientists have demonstrated that San Diego fairy shrimp cysts can be crushed under minimal weight—less than 100 grams, or 0.2 pounds, of force—when dry. See 5-Year Review at 28, citing Hathaway et al. (1996). Because cysts are so fragile, even when the vernal pools are dry, allowing people to walk or run through the vernal pools will crush and destroy the fairy shrimp cysts.<sup>2</sup>

The Navy has not analyzed the short-term or long term impacts of allowing foot traffic in the vernal pools when they are "dry." The Navy "conservatively" estimates that "10 percent of the people conducting training activity would enter into the vernal pools." See SSTC Draft EIS at 3.11-43. The Navy provides no explanation of why this estimate is conservative other than "each activity is dispersed across the vernal pool area." See SSTC Draft EIS at 3.11-43. And even under the conservative estimate, the Navy still anticipates that 207 people could enter the vernal pools each year. See SSTC Draft EIS at 3.11-43.

The Navy has not analyzed what effect moving from no foot traffic to over 200 people tramping through the vernal pools each year will have on the short-term and long-term viability of the San Diego fairy shrimp population. The Navy acknowledges that the fairy shrimp could be negatively impacted by being moved to unsuitable locations or by changing the topography or water quality in the vernal pools, but never acknowledges that foot traffic can and will crush fairy shrimp cysts. See SSTC Draft EIS at 3.11-44. Because the Navy ignores the reality that foot traffic in the vernal pools will crush cysts, it never analyzes how devastating foot traffic will be to the long-term viability of the fairy shrimp.

San Diego fairy shrimp cyst "banks" develop in pool soils that are composed of cysts from several years of breeding. See 5-Year Plan at 5. This partial hatching of cysts allows the San Diego fairy shrimp to persist in its extremely variable environment, since pools commonly fill and dry before hatched individuals can reproduce, and if all cysts hatched during an insufficient filling the species could be extirpated from a pool. See 5-Year Plan at 28, citing Philippi et al. 2001, Simovich 2005a, Simovich and Hathaway 1997. The U.S. Fish and Wildlife Service has emphasized that the ability of San Diego fairy shrimp to develop and maintain cyst banks is vital to the long-term survival of San Diego fairy shrimp populations. See 5-Year Plan at 5, citing Ripley et al. 2004, Simovich 2005a.

The Navy must take a hard look at the long-term impacts of foot traffic on the fairy shrimp. The U.S. Fish and Wildlife Service has cautioned that cyst-crushing impacts, like foot traffic, may accumulate over time, leading to a decline of cysts below a number necessary to support a viable population. See 5-Year Plan at 17.

The Navy must do a thorough analysis of the impact of its proposed plan on the critically endangered San Diego fairy shrimp. The Navy must at least address the following questions:

- Which vernal pools at Silver Strand Training Complex—South have cysts in them?
- How many steps will be taken in each vernal pool each year?
- How many cysts will be crushed by each footstep in the vernal pool?
- How many cysts are in each vernal pool?
- How many cysts need to survive in order to ensure a long-term viable population of fairy shrimp?

<sup>2</sup> The American Academy of Podiatric Sports Medicine estimates that, while running, the feet strike at a force of three to four times the body's weight. See <http://www.aapsm.org/running.html>.

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- How will the foot traffic in the vernal pools impact fairy shrimp breeding?
- What impact will long-term foot traffic through the vernal pools have on the fairy shrimp population at Silver Strand Training Complex—South?

Answering these questions is crucial not only to comply with the Endangered Species Act, but to meet the National Environmental Policy Act's requirements that the Navy take a hard look at the environmental impacts of its proposed project. Without answering these questions, the Navy cannot meet its National Environmental Policy Act obligations.

### **3. The Navy Must Survey Existing Fairy Shrimp Populations in Order to Analyze the Impacts of the Proposed Action on the Fairy Shrimp.**

The Navy's analysis in the Draft EIS is based on a study from 2003 of whether or not the San Diego fairy shrimp was present in a vernal pool. See SSTC Draft EIS at 3.11-13 Fig. 3.11-4. Before taking such a drastic measure as to allow foot traffic in the vernal pools, the Navy must gather more updated information about the existing population of fairy shrimp in vernal pools at the Silver Strand Training Complex—South. The Navy should have been monitoring fairy shrimp populations under its plan set forth in the 2002 Plan, as the plan states that the Navy will "monitor the status of the fairy shrimp population." 2002 Plan Coronado at 4-29.

According to the Draft EIS, the Navy plans to start surveying for the fairy shrimp every five years. See SSTC Draft EIS at 3.11-43. But relying on 7-year old information as a baseline and then not looking at impacts to the fairy shrimp population for 5 years is insufficient to protect the critically endangered fairy shrimp. In 5 years, the Navy could potentially cause such extensive damage to the fairy shrimp as to devastate the population. This is directly contrary to the Navy's promise in the 2002 Plan to "seek opportunities to restore vernal pool habitats that have been disturbed, while considering potential impacts to the federally endangered San Diego fairy shrimp." See 2002 Plan at 4-29.

#### **C. The Navy's Plan to Allow Foot Traffic in the Vernal Pools is Inconsistent with the Navy's Commitments it Made to Protect the San Diego Fairy Shrimp.**

The Navy's plan to reverse its prior policy of protecting the San Diego fairy shrimp at Silver Strand Training Complex—South reneges promises made to "provide a benefit to the San Diego fairy shrimp." See Designation of Critical Habitat for San Diego Fairy Shrimp, 72 Fed. Reg. 70,648, 70,678 (Dec. 12, 2007).

When the U.S. Fish and Wildlife Service designated critical habitat for the San Diego fairy shrimp, it considered designating vernal pools at the Silver Strand Training Complex—South as critical habitat.<sup>3</sup> But the U.S. Fish and Wildlife Service determined that conservation efforts in the 2002 Plan "provide a benefit to the San Diego fairy shrimp." 72 Fed. Reg. 70,678. Based on those conservation measures, the U.S. Fish and Wildlife Service exempted vernal pools at Silver Strand Training Complex—South from critical habitat designation under Section 4(a)(3) of the Endangered Species Act.

Endangered Species Act §4(a)(3)(B)(i) provides that the Secretary of the U.S. Fish and Wildlife Service shall not designate lands controlled by the Department of Defense as critical habitat if the land is: **(1)** subject to an integrated natural resources management plan and **(2)** if the Secretary determines in writing that such plan provides a benefit to the species. See 16 U.S.C. § 1533(a)(3)(B)(i). In 2007, the U.S. Fish and Wildlife Service determined that the 2002 Plan protected and benefitted the San Diego fairy shrimp.

<sup>3</sup> The Silver Strand Training Complex—South was referred to as the "Naval Radio Receiving Facility" in the Federal Register in 2007.

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Specifically, the U.S. Fish and Wildlife Service determined that the Navy would protect and benefit the San Diego fairy shrimp because the Navy promised in the 2002 Plan to: (1) monitor the status of San Diego fairy shrimp populations; (2) post signs around vernal pools; (3) advise personnel to keep vehicles on the main roads while traveling through the property; and (4) seek opportunities to restore disturbed vernal pool habitats while considering potential impacts to the San Diego fairy shrimp. See 72 Fed. Reg. 70,678.

The U.S. Fish and Wildlife Service also determined in 2007 that "[a]ctivities occurring on [Silver Strand Training Complex—South] are currently being conducted in a manner that minimizes impacts to San Diego fairy shrimp habitat." 72 Fed. Reg. 70,678. In 2007, management of vernal pools under the 2002 Plan restricted "all activities from the pools at all times." SSTC Draft EIS at 3.11-33.

The Navy's plan to degrade the vernal pools by allowing foot traffic through the pools and authorizing emergency vehicles to drive through the pools is a sharp departure from its prior management. The Navy is essentially pulling a "bait and switch" on the U.S. Fish and Wildlife Service, escaping protective critical habitat designation for its land based on a management plan it is scrapping just three years later. The Navy plans to allow emergency vehicles to drive in the vernal pools, despite the fact that the U.S. Fish and Wildlife Service "consider[s] vehicle use in vernal pool habitat... a substantive threat to the San Diego fairy shrimp." 5-Year Review at 17. And the Navy plans to allow virtually unrestricted foot traffic in the vernal pools without first surveying the extent of existing fairy shrimp populations and analyzing the impact the inevitable crushing of fairy cysts will have on the ongoing viability of the critically endangered San Diego fairy shrimp population at Silver Strand Training Complex—South.

The Navy's plan to allow foot traffic and emergency vehicles in the vernal pools at Silver Strand Training Complex—South could be disastrous for the critically endangered San Diego fairy shrimp. The Navy should abandon this ill-conceived and un-examined plan unless and until it can demonstrate with a thorough and honest analysis that the plan will satisfy the Navy's promise to "provide a benefit to the San Diego fairy shrimp." See 72 Fed. Reg. 70,678.

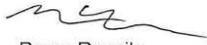
#### CONCLUSION

The Navy must analyze the direct, indirect, and cumulative impacts that pollutants from grenades, flares and explosives will have on water quality. It should provide scientifically-supported analysis of those impacts in the final environmental impact statement. The Navy still needs to take a hard look at the impacts the increased training will have on public access to the ocean, bay, and beaches, air quality, traffic, and noise.

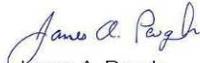
The Navy's analysis of the proposed project's impacts to endangered species such as the western snowy plover, the California least tern, and the San Diego fairy shrimp is woefully inadequate. The Navy cannot withhold serious environmental impacts analysis from the public during the NEPA process, regardless of any future plans the Navy might have to work with U.S. Fish and Wildlife Service to satisfy Endangered Species Act requirements. The National Environmental Policy Act requires that the Navy take a hard look at all the reasonably foreseeable environmental impacts of the project—that it look before it leaps—and that the analysis be available to the public to fully vet the information. The Navy has not met its burden with regard to the San Diego fairy shrimp.

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Sincerely,



Bruce Reznik  
Executive Director  
San Diego Coastkeeper



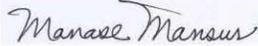
James A. Peugh,  
Conservation Chair  
San Diego Audubon Society



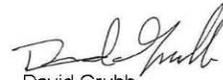
Marco Gonzalez  
Coastal Environmental Rights  
Foundation



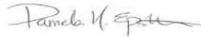
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## E.2.20 Sierra Club, San Diego Chapter



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March 9, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex DEIS  
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San Diego, CA 92132

Via email: [troy.randall@navy.mil](mailto:troy.randall@navy.mil)

Dear Mr. Randall:

Subject: Silver Strand Training Complex, Draft Environmental Impact Statement dated January 2010

The San Diego Chapter of the Sierra Club appreciates and welcomes the opportunity to comment on the Silver Strand Training Complex (hereinafter “SSTC”) draft environmental impact statement (hereinafter “DEIS”). The Sierra Club would like to recognize and commend the Navy for acting as an environmental steward, protecting and improving the nesting sites of California Least Terns and Western Snowy Plovers on the SSTC, as well as, the current policy restricting all activities from vernal pools regardless of wet or dry conditions. The Sierra Club understands and appreciates that the SSTC area sets forth unique “real world” conditions that are essential in optimized operational readiness for Navy and Marine Corps amphibious, special warfare, and mine countermeasure training.

At this time the Sierra Club is not requesting additional protective measures outside the current prevailing policy. In this regard, we strongly support the No Project alternative unless substantial improvements to the protectionist measures are made to Alternative 1. However, the Sierra Club alternatively makes its position known that Alternative 2 is highly undesirable in large part due to the reckless and permanent damage that will befall the endangered California Least Terns and Snowy Plovers in the project area.

San Diego County has more endangered species than any other county in the United States. If biodiversity indicates ecological well-being, San Diego County should be diagnosed with a near fatal disease and the only treatment is an aggressive stance for protection and conservation. The proposed increase in training operations has the catastrophic potential of affecting 13-20% of the statewide California Least Tern population as well as some of the most important Snowy Plover nesting habitats in Southern California.

If increased training operations are found to be an absolute necessity, preferential training sites must be identified. Those sites should be areas with the least possible amount of nesting and foraging. In order to properly identify these areas, the Navy must actively engage in research, data collection, and monitoring activities. Upon critical examination of the data collected, optimal nesting and foraging sites can be properly designated and military training can be conducted in accordance with all necessary precautions.

### Vernal Pools

Vernal pools are environmentally important and highly sensitive areas. Vernal pools have been around for thousands of years, at their peak there were approximately 28,500 acres of vernal pool habitat in San Diego County. By 1986, only 7% of those acres remained. A 1997 report indicated that 70% of the remaining vernal pools were found on N.A.S. Miramar or Camp Pendleton. By 1995 95% of the vernal

pools were destroyed. In 2001 it was reported that 2,400 vernal pools existed, and presently only 3% of the area's vernal pools remain.

In order to preserve this ever-diminishing vital natural resource, the Sierra Club endorses the continuation of the Navy's existing policy restricting all activities from vernal pools at all times. We appreciate the Navy's environmental intentions through the proposed wet season closures of the vernal pools. However, the limited closure is not sufficient to sustain the resource. Several species reside in this habitat, including endangered species like the San Diego Fairy Shrimp (*Branchinecta Sandiegonensis*). The Fairy Shrimp find the vernal pools indispensable to their lifecycle when they are inundated with water as well as when they are dry.

By the Navy's own admonition (see Table 3.11-3) both Alternatives 1 and 2, could adversely impact the Fairy Shrimp. Dry season impacts from potentially high volumes of foot traffic (2 to 207 individuals per year estimation, DEIS 3.11-43) carry with it the high probability of causing an extinction of the species. The fairy shrimp cysts (eggs) can be crushed and damaged, especially during the dry season. Foot traffic through the area would not only result in destruction of the cysts, but also allow for the introduction of invasive weeds, as soils are disturbed and changes to watershed hydrological system occur. As the soldiers traverse through the SSTC they are walking through areas that contain weedy species, and the seeds become attached to the soldier's shoes, clothing, and equipment. The seeds once transmitted to the vernal pools act as an invasive species resulting in shadowing, increased evaporation and transpiration rates, degrading the hardpan. Moreover, the USFWS has recognized that habitat degradation (and loss) is the single greatest threat to a species' survival. The Sierra Club would strongly encourage the Navy to continue working closely with the USFWS to implement the findings of their Biological Opinion when it is completed.

What the plan requires is the designation of an area off-limits from training operations while data is collected and evaluated. The area would consist of all the existing and identified vernal pools. While the Navy does place a limit on the amount of activity when other shoreline areas are occupied, unavailable, or less suitable for training, this limitation merely bestows unfettered discretion and no actual limitations. An appropriate method, which should be explored as an alternative, in order to protect vital natural resources and critical habitat, is placing and maintaining, clearly designated barriers within 100 feet of the vernal pools and their functional watershed.

It is also strongly suggested that the Navy conduct new baseline studies, since those studies currently in use were conducted over seven years ago, between 2001 and 2003. Thus, the current conditions remain unknown and the only means of arriving at an adequate accounting of the pools, which currently contain Fairy Shrimp, is to conduct a more recent survey. Until such time that a sufficient and timely survey has been performed, all pools exhibiting reasonable conditions for habitability by Fairy Shrimp should be fenced for protection of the species.

It is unwise to estimate the damage that could be caused to the complex ecology of the vernal pools from increased foot traffic. The Navy should proceed with their existing policy: restricting all activities from the pools at all times. If the Navy plans to proceed with the increased training operations within areas where vernal pools are known to exist, a multiyear analysis must be performed in order to fully evaluate the adverse impacts to the fairy shrimp and to the basic hydrology of the pools.

The Navy must also make note that species on the threatened and endangered lists are to be protected so they may achieve such numbers as to be delisted. The only methodology capable of achieving this goal is to protect their critical habitats. In the case of the San Diego Fairy Shrimp that critical habitat is the vernal pools during both the wet and dry periods.

It is kindly requested that the Navy respond to the comments offered throughout this letter. At this time the Sierra Club would make an additional request in support of response to comments referencing

numerous other significant and inadequately addressed environmental impacts associated with the SSTC DEIS by The Southwest Wetlands Interpretive Association, Sustainable Wildlands United and The San Diego Audubon Society. The Sierra Club shares the San Diego Audubon Society's well-founded concern relating to inadequate noise assessment in Section 3.6 Acoustic environment. Sierra Club reaffirms the directive to perform a noise study on indirect impacts of the increase in average noise and/or peak noise from the increased gunfire, flares and detonation on the least terns and snowy plovers eggs and chicks.

Thank you for your consideration of these comments.

Respectfully Submitted,



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Prepared by:  
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The San Diego Chapter of the Sierra Club is San Diego's oldest and largest grassroots environmental organization, founded in 1948. Encompassing San Diego and Imperial Counties, the San Diego Chapter seeks to preserve the special nature of the San Diego and Imperial Valley area through education, activism, and advocacy. The Chapter has over 14,000 members. The National Sierra Club has over 700,000 members in 65 Chapters in all 50 states, and Puerto Rico.



## E.2.21 Southwest Wetlands Interpretive Association



March 4, 2010

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2730 McKean St. Bldg. 291  
San Diego, CA 92136-5198

Dear Mr. Randall

The Southwest Wetlands Interpretive Association (SWIA) appreciates the opportunity to comment on the Draft Environmental Impact Statement for the Silver Strand Training Complex, SSTC. SWIA has had the opportunity to work with the US Navy, USN, for over 30 years at the Tijuana Estuary and San Diego Bay. SWIA along with the Navy and a number of other agencies and jurisdictions serves on the Management Authority at the Tijuana River National Estuarine Research Reserve, TRNERR.

SWIA worked with the Navy, the US Fish and Wildlife Service, USFWS, the California Department of Fish and Game, CDFG and the California Department of Parks and Recreation, CDPR, to establish the Tijuana Slough National Wildlife Refuge in 1980, the TRNERR under the National Oceanic and Atmospheric Administration, NOAA, in 1981 and the San Diego Bay National Wildlife Refuge in 1999. SWIA has been directly involved with the Marine Life Protection Act establishing Marine Protected Areas off the coast of California. Again the Navy was directly involved in this process.

SWIA realizes that SSTC is a critical program training area that is difficult or cannot be duplicated anywhere else. We realize that the mission is to support USN and Marine Corps amphibious, special warfare and mine countermeasure training.

SWIA also realizes that the USN has jurisdiction over lands from the international border to Orange County that are critical for maintaining and protecting some of the most important habitat types supporting many endangered and threatened species in Southern California. Biodiversity is an indicator of ecological health and endangered and threatened species like the Least Tern and Western Snowy Plover are indicative that the health of an ecological complex is at risk. San Diego County has more endangered species than any county in the United States.

SWIA views the USN not only as a military security force but also as an ecological security force. The USN, USFWS, biological contractors and other agencies have worked very well together to address, maintain and enhance ecological protection. We hope that these relationships will continue as we proceed even with the additional training at SSTC.

Southwest Wetlands Interpretive Association • P.O. Box 575 • Imperial Beach, CA 91933  
tel. (619) 575-0550 • fax (619) 424-6420 • [www.swia4earth.org](http://www.swia4earth.org)

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There is concern that potential additional operations could affect 13-20% of the statewide California Least Tern Population as well as some of the most important Snowy Plover nesting habitat in southern California but through cooperative effort with agencies like the USFWS this may be resolved. It is assumed the effects of training on Least Tern nesting sites at lanes 1-7 north of Silver Strand State Beach, SSSB, are compatible. Is there enough research data to support the concept of compatibility between tern nesting and training exercises at this site? This makes the important assumption that these birds are able to adapt to these activities without disruption which is important to know as training escalates. It is our hope that research and data collection will be carried out at this site and help answer these important questions about bird adaptation and military training.

We hope that there will be a high level of protection for Least Tern nesting and foraging including lanes 8 through 10.

Preferential training should be considered in lanes with the least nesting and foraging. But research, data collection and monitoring should lead to better management enhancing training and environmental protection.

We also want to encourage a high level of protection at Delta II North and Delta I South. These have been successful nesting and recruitment sites and we hope that they will continue to be maintained through management, and monitoring.

We hope that ongoing operations will be designed to maintain optimal nesting and foraging while carrying out the military mission.

Other issues that must be addressed include protection of vernal pools, predation and use of military working dogs.

We believe that vernal pools should be monitored and that research data collection will enable a reasonable approach to management meeting the needs of military operations and environmental protection. These sensitive habitats should be incorporated into biological off limit areas for training while data collection is evaluated.

Predation is a serious problem. The Gull Billed Tern presents a danger for tern and plover chicks. It is not a listed species at this date but is under consideration. Predation is exacerbated by habitat loss for all these species and this problem must also be addressed.

Using the Endangered Species Act to protect a species must be solely a decision made by qualified scientists. The decision to list or delist a species must be made by the recovery team and should never be influenced by political policy and or public pressure.

The utilization of military working dogs should be coordinated in a way that does not lead to environmental impact.

The impact on near shore habitat and the interrelationship between the marine and beach ecosystems must be taken into consideration. This is especially important concerning least tern foraging. There is also interest in looking at the impact commercial bait fishing has on least tern foraging along the Silver Strand and the barrier beach at the Tijuana Estuary. The opportunity for research at these two sites has

been suggested allowing for a comparative analysis of tern foraging success. Commercial bait fishing and military operations may impact tern foraging. Both sites are important to the bait fishing industry.

The potential impact of climate change and sea level rise is of great importance to extended use of the Silver Strand for military operations and as a nesting site for terns and plovers. Sea level rise will have ecological and military impacts at this site. The rise in sea level is at least 10 cm higher than it was in 1974 which is significant. This number is with reference to the TRNERR site which is relevant to the Silver Strand and the Cities of Imperial Beach and Coronado.

The SSTC-South is also an important issue. There are Western Snowy Plover nests on the beaches at this site. The Navy has not been able to control civilian recreational beach use and off leash dogs. This has been a major issue with the destruction of nests and has led to low population success. A coordinated effort should be made to control this site. The YMCA Camp Surf should be able to continue their youth program but must follow the rules. Violations would lead to potential closure of the site.

We want to encourage the Navy to work closely with the USFWS and implement the findings in the Biological Opinion when it is completed.

The City of Imperial Beach has worked with the Navy in the past to establish a dog park near the base entry off Silver Strand Blvd. If the legal issues could be worked out between the Navy and the City this would enable people to use the dog park rather than the beach especially during the nesting season.

The City and SWIA would also like to work with the Navy on completion of the Coast Trail from Oregon to Mexico. This is dependent upon the ability of the City, County and State to work with the Navy allowing this trail to cross Navy lands on the Silver Strand. The trail concept would go between the eastern Navy fence boundary and Highway 75 then continue to the area previously described as the dog park. From there it would go along Carnation Ave outside Navy land. See the included map.

The Dog Park and the coastal trail would help to mitigate recreational beach use and hence allow military operations and protection of plover nesting sites. The dune system from the Coronado/Imperial Beach City boundary to the Silver Strand State beach is in better condition than most dune systems in San Diego County but they are heavily invaded by non native species. State Parks has done a commendable job restoring the dunes along their beach. It is hoped that the Navy and state might be able to look at similar dune enhancement on the Navy lands.

The City of Imperial Beach is concerned about increased noise levels as operations are enhanced. We urge the Navy to install a 10:00 PM curfew on high decibel activities. Neighbors need their sleep in order to be ready for work the next day. This is a reasonable request in a suburban area.

In conclusion SWIA suggests an organization like the Management Authority that currently exists at the TRNERR be established on Silver Strand. The Navy has been a member of this body since its inception in 1982. This organizational structure has worked successfully to resolve many issues in a way conducive to carrying out the missions of international, federal, state and county agencies, NGO'S, universities, private contractors and jurisdictions including San Diego County, and the Cities of Imperial Beach and San Diego. It also serves as an important forum for public input and can solve problems in their early stages. SWIA played an important role in helping to formulate the TRNERR Management Authority and would be interested in helping to do the same at the Silver Strand site.

Again SWIA appreciates this opportunity to give input on this draft document.

Sincerely,



Michael A. McCoy, DVM  
President: Southwest Wetlands Interpretive Association



## E.2.22 Sustainable Wildlands United

### *Sustainable Wildlands United*



March 8, 2010

Naval Facilities Engineering Command, Southwest  
Attn: Mr. Kent Randall – Silver Strand Training Complex EIS  
1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
San Diego, CA 92132

Submission Via Email: [tory.randall@navy.mil](mailto:tory.randall@navy.mil)

**RE: Silver Strand Training Complex, Draft EIS January, 2010**

Dear Mr. Randall:

The affiliated organizations/advisors of Sustainable Wildlands United offer the following comments upon the draft EIS.

#### Vernal Pools

While we appreciate the proposed wet season closure of vernal pools, the closure is not sufficient to sustain the resource. The existing policy restricting all activities from vernal pools at all times should be maintained. Dry season impacts from potentially high volumes of foot traffic (12 to 207 individuals per year estimation, DEIS 3.11-43) would result in mortality of the endangered San Diego fairy shrimp. Crushing of fairy shrimp cysts, introduction of invasive weeds as soils are disturbed and changes to watershed hydrological systems would occur relative to patterns of ground impacts. The impacts associated with establishing repetitive seasonal foot traffic are likely to lead to the loss of San Diego fairy shrimp from the site. The USFWS has acknowledged that habitat *degradation* (and loss) is the greatest ongoing threat to species survival.

To achieve effective and real avoidance, please place and maintain barriers that notice and identify vernal pools and their functional watershed within 100 feet, and maintain existing policy restricting all activities at all times.

For any vernal pool that absolutely cannot be avoided, annual baseline surveys should be conducted. In the event of a survey showing a decline in San Diego fairy shrimp from the previous year, activities should be halted until surveys demonstrate recovery to baseline levels. The proposed surveys in five-year intervals are too infrequent to timely detect significant decline. Annual surveys could allow implementation of protective adaptive management measures to attempt recovery.

---

9222 Lake Canyon Road, Santee, CA 92071 Tel/Fax (619) 258-7929

Conservation Advisors: Ellen T. Bauder, PhD – Plant Ecologist, San Diego State University Research Associate; James A. Peugh, S.D. Audubon Society; Pamela N. Epstein, Sierra Club – S.D. Chapter; Richard W. Halsey, California Chaparral Institute; John Buse, Center for Biological Diversity; Van K. Collinsworth, M.A., Preserve Wild Santee.

## *Sustainable Wildlands United*



### California Least Terns

The proposed action has the potential to adversely affect a very substantial portion of the statewide California least tern population. The federally-listed endangered least tern is a noteworthy Endangered Species Act success story in terms of breeding pairs, but it has not fully recovered, and as the DEIS indicates (3.12-18), fledgling rates have remained static or declined in recent years.

Unfortunately, the DEIS discusses the effects of the proposed action on least tern recovery primarily in terms of breeding pairs rather than reproductive success. Reproductive success rates should be an additional criterion for determining the significance of the action's impacts. In addition, the EIS should evaluate the potential for the action to contribute to impacts to least terns through increased predation or other indirect effects.

Greater noise from operations are likely to reduce nest productivity for least terns and due to temporary and permanent nest abandonment that leaves eggs and chicks vulnerable to predators. The DEIS, however, omits discussion of noise impacts to these sensitive biological receptors. The EIS should analyze and mitigate for this impact.

We appreciate the inclusion of avoidance measures in Alternative 1, but remain concerned that the loss of up to 105 least tern nests would represent a significant impact to the species and would impede recovery of the least tern. Additional least tern mitigation or avoidance measures should be incorporated in Alternative 1.

### Western Snowy Plovers

As noted for the least tern, the EIS should evaluate the potential for the action to contribute to impacts to snowy plovers through increased predation (including predation by least terns) or other indirect effects. In addition, the EIS should include a thorough analysis of the direct and indirect noise effects on snowy plovers, and adopt additional mitigation measures for these impacts.

Thank you for considering these comments,

/s/

Van K. Collinsworth, M.A., Conservation Director, Sustainable Wildlands United  
Resource Analyst, Executive Director, Preserve Wild Santee

/s/

Ellen T. Bauder, PhD – Plant Ecologist, San Diego State University Research Associate

---

9222 Lake Canyon Road, Santee, CA 92071 Tel/Fax (619) 258-7929

Conservation Advisors: Ellen T. Bauder, PhD – Plant Ecologist, San Diego State University Research Associate; James A. Peugh, S.D. Audubon Society; Pamela N. Epstein, Sierra Club – S.D. Chapter; Richard W. Halsey, California Chaparral Institute; John Buse, Center for Biological Diversity; Van K. Collinsworth, M.A., Preserve Wild Santee.

*Sustainable Wildlands United*

/s/

James A. Peugh, Conservation Committee Chair, San Diego Audubon Society

/s/

Pamela N. Epstein, Esq., LL.M, Legal Committee Chair, Sierra Club - San Diego Chapter

/s/

Richard W. Halsey, California Chaparral Institute

/s/

John Buse, Senior Staff Attorney, Center for Biological Diversity

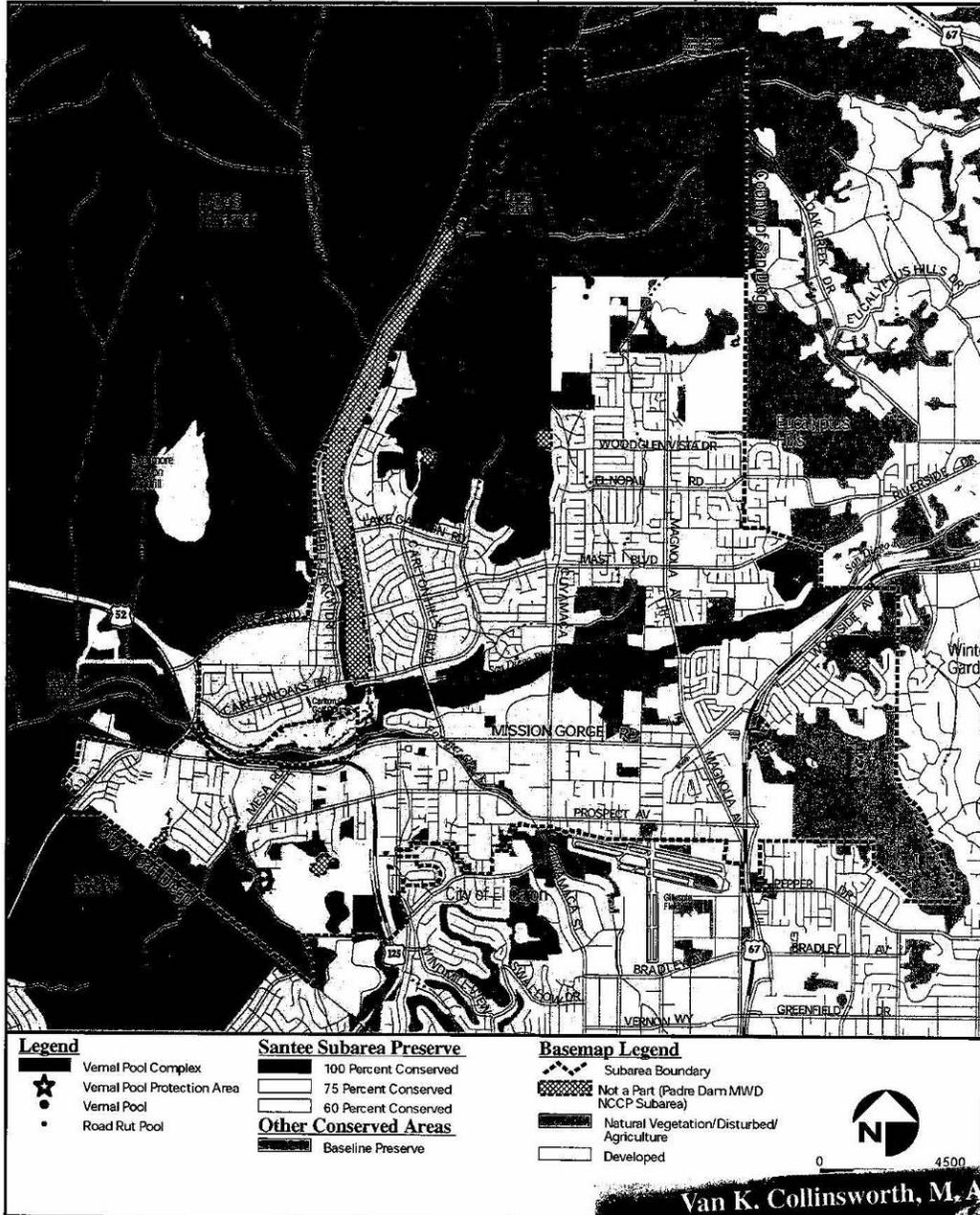
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9222 Lake Canyon Road, Santee, CA 92071 Tel/Fax (619) 258-7929

Conservation Advisors: Ellen T. Bauder, PhD – Plant Ecologist, San Diego State University Research Associate; James A. Peugh, S.D. Audubon Society; Pamela N. Epstein, Sierra Club – S.D. Chapter; Richard W. Halsey, California Chaparral Institute; John Buse, Center for Biological Diversity; Van K. Collinworth, M.A., Preserve Wild Santee.

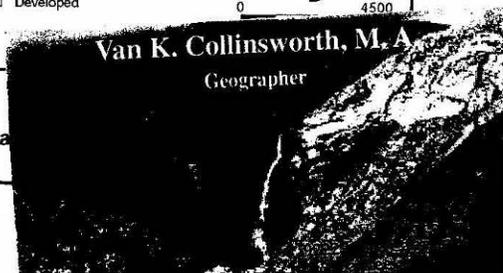
**E.2.23 Sustainable Wildlands United**

*Vernal Pool habitat on Fanta Ranch is for sale  
 Perfect fit for "Readiness & Environmental Protection Initiative"*



Vernal Pool Location Data

/ak/santee/plots/figures/figs.ent 24



## E.2.24 Sustainable Wildlands United

**Representing:** Organization

**Organization:** Sustainable Wildlands United

**Name:** Van Collinsworth

**Date:** 3/9/2010 5:56:43PM

**Subject:** Military Training Activities

**Comment:** March 8, 2010 Naval Facilities Engineering Command, Southwest Attn: Mr. Kent Randall – Silver Strand Training Complex EIS 1220 Pacific Highway, Building 1, 5th Floor San Diego, CA 92132 Submission Via Email: tory.randall@navy.mil RE: Silver Strand Training Complex, Draft EIS January, 2010 Dear Mr. Randall: The affiliated organizations/advisors of Sustainable Wildlands United offer the following comments upon the draft EIS. Vernal Pools While we appreciate the proposed wet season closure of vernal pools, the closure is not sufficient to sustain the resource. The existing policy restricting all activities from vernal pools at all times should be maintained. Dry season impacts from potentially high volumes of foot traffic (12 to 207 individuals per year estimation, DEIS 3.11-43) would result in mortality of the endangered San Diego fairy shrimp. Crushing of fairy shrimp cysts, introduction of invasive weeds as soils are disturbed and changes to watershed hydrological systems would occur relative to patterns of ground impacts. The impacts associated with establishing repetitive seasonal foot traffic are likely to lead to the loss of San Diego fairy shrimp from the site. The USFWS has acknowledged that habitat degradation (and loss) is the greatest ongoing threat to species survival. To achieve effective and real avoidance, please place and maintain barriers that notice and identify vernal pools and their functional watershed within 100 feet, and maintain existing policy restricting all activities at all times. For any vernal pool that absolutely cannot be avoided, annual baseline surveys should be conducted. In the event of a survey showing a decline in San Diego fairy shrimp from the previous year, activities should be halted until surveys demonstrate recovery to baseline levels. The proposed surveys in five-year intervals are too infrequent to timely detect significant decline. Annual surveys could allow implementation of protective adaptive management measures to attempt recovery. California Least Terns The proposed action has the potential to adversely affect a very substantial portion of the statewide California least tern population. The federally-listed endangered least tern is a noteworthy Endangered Species Act success story in terms of breeding pairs, but it has not fully recovered, and as the DEIS indicates (3.12-18), fledgling rates have remained static or declined in recent years. Unfortunately, the DEIS discusses the effects of the proposed action on least tern recovery primarily in terms of breeding pairs rather than reproductive success. Reproductive success rates should be an additional criterion for determining the significance of the action's impacts. In addition, the EIS should evaluate the potential for the action to contribute to impacts to least terns through increased predation or other indirect effects. Greater noise from operations are likely to reduce nest productivity for least terns and due to temporary and permanent nest abandonment that leaves eggs and chicks vulnerable to predators. The DEIS, however, omits discussion of noise impacts to these sensitive biological receptors. The EIS should analyze and mitigate for this impact. We appreciate the inclusion of avoidance measures in Alternative 1, but remain concerned that the loss of up to 105 least tern nests would represent a significant impact to the species and would impede recovery of the least tern. Additional least tern mitigation or avoidance measures should be incorporated in Alternative 1. Western Snowy Plovers As noted for the least tern, the EIS should evaluate the potential for the action to contribute to impacts to snowy plovers through increased predation (including predation by least terns) or other indirect effects. In addition, the EIS should include a thorough analysis of the direct and indirect noise effects on snowy plovers, and adopt additional mitigation measures for these impacts. Thank you for considering these comments. /s/ Van K. Collinsworth, M.A., Conservation Director, Sustainable Wildlands United Resource Analyst, Executive Director, Preserve Wild Santee /s/ Ellen T. Bauder, PhD – Plant Ecologist, San Diego State University Research Associate /s/ James A. Peugh, Conservation Committee Chair, San Diego Audubon Society /s/ Pamela N. Epstein, Esq., LL.M, Legal Committee Chair, Sierra Club - San Diego Chapter /s/ Richard W. Halsey, California Chaparral Institute /s/ John Buse, Senior Staff Attorney, Center for Biological Diversity

**E.2.25 United States Department of the Interior****United States Department of the Interior**

OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
Pacific Southwest Region  
1111 Jackson Street, Suite 520  
Oakland, California 94607

IN REPLY REFER TO:  
ER10/112

*Hardcopy*

10 March 2010

Mr. Kent Randall  
Naval Facilities Engineering Command, Southwest  
Silver Strand Training Complex EIS  
1220 Pacific Highway, Bldg. 1, 5<sup>th</sup> floor  
San Diego, CA 92132

Subject: Review of Draft Environmental Impact Statement (DEIS) for the Silver Strand Training Complex, San Diego, CA

Dear Mr. Randall:

Please disregard the Department of the Interior's no comment letter sent electronically on March 8, 2010. Please consider these comments from the U.S. Fish and Wildlife Service.

The San Diego Bay National Wildlife Refuge includes the South San Diego Bay Unit, located at the southern end of San Diego Bay. The 2,300-acre refuge unit includes open bay, solar salt evaporation ponds (salt ponds), and downstream end of the Otay River floodplain. Salt ponds consist of diked open water cells with differing levels of salinity, which provide roosting habitat for a variety of migratory birds during high tide, supplemental foraging habitat for various shorebirds, and primary foraging habitat for other species such as phalaropes and eared grebes.

Salt pond levees also provide nesting habitat for a variety of ground nesting birds, including the endangered California least tern, the threatened western snowy plover, and an array of other tern species, some of which only nest in a few locations in the United States. The American Bird Conservancy has designated the South San Diego Bay Unit as a Globally Important Bird Area due to presence of globally significant numbers of nesting gull-billed terns and continentally significant numbers of surf scoters, Caspian terns, and western snowy plovers.

The entire southern end of San Diego Bay, including Sweetwater Marsh and South San Diego Bay Units, has been recognized as a Western Hemisphere Shorebird Reserve Network Site.

The primary issue of concern is the U.S. Navy's proposal to significantly expand training activities utilizing helicopters at Silver Strand Training Center (SSTC) South. The U.S. Navy's

SSTC South is located immediately west of the South San Diego Bay Unit. The Kaufman Drop Zone, which is located in SSTC South, would experience an increase in helicopter activities based on the DEIS. Proposed changes would result in helicopter activities increasing from 724 flights per year to 1,262 flights per year with actual landings increasing from 4 lands per year to 40 landings per year.

It is not clear from information provided what percentage of helicopter flights and landings would occur in SSTC South as compared to SSTC North. Additionally, specific training exercises (e.g., Tactical Recovery of Aircraft and Personnel and Amphibious Raid) would employ between 5 and 16 helicopters at a given time which may fly over the South San Diego Bay Unit. When approaching from the bay side to land at the Kaufman Drop Zone, helicopters may fly low over the South San Diego Bay Unit.

These low-altitude flights have potential to adversely affect Refuge resources (e.g. nesting migratory birds, federally endangered California least tern, and federally endangered western snowy plover).

The Service is providing the following recommendations to address concerns presented in this comment letter.

1. The Final EIS should include a map depicting anticipated helicopter flight routes and heights at SSTC South. The Service recommends flight routes avoid flying over South San Diego Bay Unit and instead travel to SSTC South along routes that avoid important wildlife areas or via the Pacific Ocean. We believe these alternative flight routes would reduce impacts of expanded helicopter training on South San Diego Bay Unit.
2. The Final EIS should describe the San Diego Bay National Wildlife Refuge South San Diego Bay Unit in the Affected Environments section. While the DEIS recognizes the Refuge, significant biological resources within this Unit should be fully described. We recommend the Final EIS provide a thorough analysis of effects resulting from proposed expanded training on Refuge resources (e.g., nesting migratory birds, federally endangered California least tern, and federally threatened western snowy plover). We believe that expanded training activities may affect listed species on the South San Diego Bay Unit and recommend the Navy consult under section 7 of the Endangered Species Act with our Carlsbad Fish and Wildlife Office.

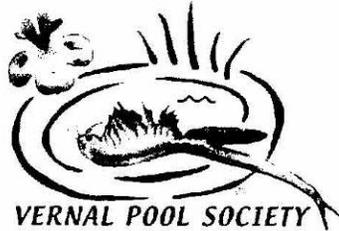
The Service appreciates the opportunity to comment on this DEIS. If you have any questions, please contact Kurt Roblek at (619) 575-2704.

Sincerely,



Patricia Sanderson Port  
Regional Environmental Officer

## E.2.26 Vernal Pool Society



VERNAL POOL SOCIETY  
 Mary Anne Pentis, president  
 Al Pentis, wetlands biologist  
 PO Box 2154  
 Ramona, CA 92065  
 760-789-4085  
 pentis@hotmail.com

NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST  
 ATTN: Mr. Kent Randall - Silver Strand Training Complex EIS  
 1220 Pacific Highway, Building 1, 5<sup>th</sup> Floor  
 San Diego, CA 92132

March 5, 2010

RE: SILVER STRAND TRAINING COMPLEX DRAFT ENVIRONMENTAL IMPACT  
 STATEMENT (DEIS) 5090 Ser No1CE1/046 14 Jan 10

We appreciate the opportunity to comment on the DEIS referenced above. Our expertise has been in the area of wetlands, marine environments, and vernal pool ecosystems. We have been involved with the protection of endangered and threatened species and their necessary supporting environments and ecosystems for more than 40 years, particularly in the San Diego County region.

As an example, during the late 1960s and 1970s we were instrumental in protecting the endangered California Least Tern nesting sites in San Diego County, particularly those that remained in Mission Bay, San Diego. At this time we formed citizen patrols to protect the nesting birds, their eggs and their chicks. After bringing continuous attention to the need to preserve and protect these dwindling impacted nesting areas, the State of California, in conjunction with the US Fish & Wildlife Service, formed the Least Tern Recovery Team. Consequently, some remaining areas were designated as protected California Least Tern nesting sites, and some have subsequently afforded the endangered Snowy Plover protection in these areas as well.

For the past 20 years we have been actively educating the public and our decision makers to the plight of our endangered Fairy Shrimp and their Vernal Pool Ecosystems. With less than 2% (two percent) of these unique biomes remaining in San Diego County we worked with the agencies and municipalities to help bring the Multiple Species Conservation Plan (MSCP) to fruition.

2 of 3

Specifically we've noted that present vernal pool sites will be subjected to foot-traffic only during the dry season months; such activity would eventually destroy the dry pool pan and make the necessary accumulation of rain water eventually impossible; the subject here is the **survival of vernal pools**. Also, vehicular and/or foot-traffic would destroy an intolerable, even though unspecified, percentage of the cyst embryos.

We, of course, recognize the need for trained United States Navy personnel; God bless them; however, we believe the proposed Naval Training activities within the Silver Strand Training Complex and southern near shore areas of Naval Air Station North Island expansions (the specific vernal pool subject herewith) will have a **NEGATIVE impact** on the endangered species which rely on these areas to at least sustain their populations.

Under **Table ES-2: Summary of Effects 3.11 Birds**, there is no way that this statement in regards to "Birds" from Alternative I and/or Alternative II can be relied upon: "...Loss in California least terns nesting would not decrease the nesting total below the 5,722 annual nests to maintain a stable range wide population, and would be below the 2007 incidental take allowance issued by the USFWS. ..."

Unforeseen impacts will always occur and the populations will continue to be unable to sustain themselves in the long term.

Nor is there any reasonable assumption that the following stated impacts from **Table ES-2: Summary of Effects 3.11 Terrestrial Biological Resources** under Alternative I and/or Alternative II, particularly to Vernal Pool species can be relied upon:

"... • Foot traffic in vernal pool areas could adversely impact individual fairy shrimp. However, impacts would be minimized, due to the low levels of foot traffic that would occur in the pools, and the limitation of those activities to when the vernal pools are dry. Potential impacts to the San Diego fairy shrimp are also associated with emergency vehicle use of unpaved roads in the vernal pool area.  
• Potential increased training on SSTC-N beach lanes Blue 2, Orange 1, and Orange 2 could increase impacts to special status plants and invertebrates in these areas while decreasing impacts at other locations. Some trampling of vegetation at these locations is expected, though the overall effect on non-avian biological resources is expected to be short term and of moderate intensity due to the potential overlap of concentrated activities in the dunes and upper beach areas. These activities do not pose long term impacts, effects are expected to be temporary and cease at the termination of an activity.  
• Increased foot traffic could cause behavioral impacts to surrounding wildlife, though this effect is expected to be temporary. • Various activities have the potential to impact Brand's phacelia on the beach in the Bravo training area. ..."

There is no logical reason to assume that the proposed Mitigation measures will negate any impacts which occur despite the Navy's and US Fish & Wildlife Service' best intentions.

As to the MITIGATION pleading, we have been of the opinion that no such procedure is any longer viable and therefore not even a conceivable solution for requesting any form of vernal pool destruction permit. The vernal pools that have thus far survived the onslaught of civilization's encroachments have already left them with, we believe, less than 1% (one percent) of their original population. These vernal pool creatures are not just Endangered but **CRITICALLY ENDANGERED**, and **ALL** vernal pools are to be protected, **NONE** available

3 of 3

to be offered for mitigation. Upon investigation past mitigation attempts are failures.

The species in question and their necessary, supporting ecosystems which remain today require all the protection we can afford them. They CANNOT accept any further impacts if we wish to have any hope for their continued existence let alone expectations for their Recovery.

Therefore, we recommend the NO ACTION ALTERNATIVE.



Mary Anne Pentis, President



Al Pentis, Wetlands Biologist

## **E.3 PUBLIC HEARING COMMENTS**

### **E.3.1.1 Imperial Beach**

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REPORTER'S TRANSCRIPT OF PUBLIC HEARING

RE: SILVER STRAND TRAINING COMPLEX  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

TUESDAY, FEBRUARY 23, 2010  
IMPERIAL BEACH, CALIFORNIA

REPORTED BY REGINA L. GARRISON, CSR NO. 12921

1 REPORTER'S TRANSCRIPT OF PUBLIC HEARING,  
2 commencing at the hour of 4:00 p.m., on Tuesday, February 23,  
3 2010, at 825 Imperial Beach Boulevard, Imperial Beach,  
4 California, before Regina L. Garrison, Certified Shorthand  
5 Reporter in and for the State of California.  
6  
7

I N D E X

9 PUBLIC HEARING	PAGE
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12 By: Lewis Michaelson . . . . .	4
13 Staff Presentation	
14 By: Captain Yancy Lindsey . . . . .	6
15 By: Delphine Lee . . . . .	11
16 Public Comments . . . . .	22

1 (5:08 P.M.)

2 ORAL COMMENTS

3 \* \* \* \* \*

4 ZEKE MAZUR

5 522 Seventh Street, Apartment E

6 Imperial Beach, California

7

8 MR. MAZUR: They were talking about having training  
9 sessions on the beach, exclusive training sessions. They  
10 don't want people around. I think it would be a good idea to  
11 have them notify the Union Tribune -- I can't tell if I'm  
12 going too fast -- notify and put that on the weather page  
13 where they have water temperatures, tide heights and polluted  
14 beaches. It would be nice if they had a notice that Silver  
15 Strand area is going to be off limits to the public during  
16 such and such times. Thank you.

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1 (6:03 P.M.)

2 WELCOME TO PUBLIC HEARING

3 \* \* \* \* \*

4 MR. MICHAELSON: Good evening and thank you for  
5 coming tonight. My name is Lewis Michaelson, and I will be  
6 the moderator for tonight's hearing on the Navy's Silver  
7 Strand Training Complex draft environmental impact statement,  
8 which you will hear referred to tonight as the draft EIS.  
9 Here to receive your comments are Captain Yancy  
10 Lindsey, commanding officer at Naval Base Coronado, and  
11 Ms. Delphine Lee, project manager for the Navy's Pacific  
12 Fleet. We also have Mr. Kent Randall. He's the project  
13 coordinator from Naval Facilities Engineering Command  
14 Southwest. He's a primary point of contact -- you'll notice  
15 the address -- for sending your comments to. His name is the  
16 one on it. All right. So he's that primary point of  
17 contact.

18 Let's go over tonight's agenda. Hopefully, you've  
19 had -- most of you, I believe, had the opportunity to talk to  
20 the many staffers at all the poster stations and got as many  
21 of your questions answered as possible tonight. The primary  
22 purpose of this portion of the hearing is for the panel  
23 members to listen to your comments firsthand. They will not  
24 be answering questions during this phase of the proceedings.

25 Any comments and questions at this point will be

1 addressed in the final EIS, which comes next. After I finish  
 2 this introduction, Captain Lindsey is going to give a brief  
 3 overview of the Navy's Silver Strand Training Complex and  
 4 training activities. Next, Ms. Delphine Lee will brief you  
 5 on the environmental impact analysis process and summarize  
 6 the results reported in the draft EIS.

7 The last item on the agenda, however, is really the  
 8 most important. The public comment session is your  
 9 opportunity to provide information and make statements on the  
 10 record. Your input ensures that the decision-makers can  
 11 benefit from your knowledge of the local area and any  
 12 environmental effects you think may result from the proposed  
 13 action or alternatives.

14 To request an opportunity to make a verbal comment,  
 15 we've asked as you came in the door -- hopefully everyone had  
 16 the opportunity to fill out a comment card. If you haven't  
 17 done that yet, let us know and just get one from the  
 18 registration table. I have quite a few already, and I will  
 19 be calling on people in the order in which they signed up to  
 20 speak.

21 Every speaker, including public officials,  
 22 organizational spokespersons and private individuals, will  
 23 have three minutes each to provide his or her comments.  
 24 However, if you don't feel comfortable standing up here  
 25 tonight to make a statement, you may submit a written

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1 statement tonight. We also have the touchscreens where you  
 2 can type in your comments.

3 You can also mail them in, or you can submit them  
 4 online electronically as long as they are received or  
 5 postmarked by March 9th. Written comments, keep in mind, are  
 6 given the same weight and consideration as verbal comments  
 7 here tonight. So it's just as good a way to comment as it is  
 8 orally.

9 And now it is my pleasure to introduce Captain  
 10 Lindsey.

11 CAPTAIN LINDSEY: Thanks, Lewis.

12

## STAFF PRESENTATION

14

\* \* \* \* \*

15 CAPTAIN LINDSEY: Good evening and welcome to the  
 16 public hearings for the Silver Strand Training Complex draft  
 17 EIS. My name is Captain Yancy Lindsey, and I'm the  
 18 commanding officer of Naval Base Coronado.

19 I want to thank you on behalf of the United States  
 20 Navy for attending this evening. This is one of two public  
 21 hearings the Navy is holding in Southern California for the  
 22 Silver Strand Training Complex draft EIS. For  
 23 simplification, during the remainder of my presentation, I  
 24 may refer to the Silver Strand Training Complex by its  
 25 acronym, SSTC or "stick," is one of the words we use to -- I

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1 think it will shorten down the number of times I -- my  
2 presentation if I can refer to it as "stick."

3           Okay. The Navy has been training at the Silver  
4 Strand Training Complex for over 60 years. It is comprised  
5 of the Silver Strand Training Complex, north, this area, and  
6 the Silver Strand Training Complex to the south. Training  
7 activities are conducted in the Pacific Ocean, San Diego Bay,  
8 on the beach and inland. Training is also conducted on the  
9 southern near-shore areas in the Naval Station North Island,  
10 this area here.

11           The North Island area is not technically part of  
12 the SSTC area but is included in this study because of  
13 similar types of training that are conducted there. Navy  
14 airfield operations at North Island and Imperial Beach are  
15 not of the scope or not part of the scope of this EIS. I  
16 just want to say that again: Airfield operations at North  
17 Island and at Imperial Beach, the outlying field in Imperial  
18 Beach are not part of the scope of this EIS.

19           The overall mission of the Silver Strand Training  
20 Complex is to support U.S. Navy and Marine Corps amphibious,  
21 special warfare and mine countermeasure and other near-shore  
22 training by providing local land, sea and airspace support  
23 services, equipment and supplies and training facilities that  
24 will help naval and Marine Corps forces achieve and maintain  
25 the highest levels of operational readiness.

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1           There are a number of Navy commands that rely upon  
2 SSTC to conduct required training. These include the Navy  
3 SEALs, explosive ordnance disposal teams, assault craft  
4 units, beach master units, amphibious construction battalion,  
5 special boat units, Marine Corps small boat raid companies  
6 and coastal defense units.

7           SSTC is used to support the training of these  
8 commands and their personnel, who, for the most part, are  
9 stationed in the San Diego metropolitan area. The Navy also  
10 conducts basic new recruit training on SSTC. This training  
11 is conducted in formal courses with syllabi and instructors,  
12 including both classroom and field work. For example, all  
13 SEAL recruits must complete the basic underwater demolition  
14 training program on the Silver Strand Training Complex to be  
15 qualified as a Navy SEAL.

16           There are over 70 different types of training  
17 activities that occur at the SSTC. One of the most common  
18 activities is basic physical fitness, that is, running,  
19 exercising, swimming, those types of things. Personnel may  
20 also learn how to operate different small Navy vessels and  
21 maneuver them across calm water or more challenging surf  
22 conditions.

23           Advanced students learn how to collect intelligence  
24 through reconnaissance, beach raids and assault coordination.  
25 Personnel also learn to seek, find and identify simulated

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1 mines to include dismantling and neutralizing them.  
 2           There is also logistics-related training.  
 3 Personnel work together to move equipment, vehicles and  
 4 supplies from a large offshore ship to onshore areas. This  
 5 may involve shuttling craft and people between the ship and  
 6 the shore and/or reeling out hoses to transfer fluids from  
 7 ship to shore.

8           The Silver Strand Training Complex has a unique  
 9 combination of attributes that make it an ideal venue to  
 10 train servicemen and women in amphibious warfare, special  
 11 warfare and mine warfare operations. SSTC contains large  
 12 stretches of water, beach and inland areas.

13           Access to both the calm bay and rough ocean allow  
 14 personnel to initiate training in a calmer environment and  
 15 then quickly and easily transition to a more challenging  
 16 environment on the ocean side as they improve their skills  
 17 and fitness levels.

18           Southern California's temperate climate also allows  
 19 for year-round training. The SSTC is also centrally located  
 20 within our nation's largest concentration of naval forces.  
 21 Its close proximity to necessary infrastructure, logistics,  
 22 personnel and other complimentary training ranges makes it a  
 23 critical training range for a wide range of military  
 24 commands. This allows our servicemen and women stationed in  
 25 the San Diego area to fulfill their daily training

1 requirements without having to travel away from home.

2           In other words, the ranges are close to home so  
 3 they can do realistic, quality training and sleep in their  
 4 bed that night, a luxury that not many military folks are  
 5 able to take advantage of with the increased deployment  
 6 schedules that we've been experiencing.

7           To accomplish our mission in Southern California,  
 8 it is critical for the Navy to maintain and operate these  
 9 training areas so that naval forces and other military  
 10 services can train realistically. Realistic training is  
 11 critical for military readiness and is the single greatest  
 12 asset the military has in preparing and protecting American  
 13 servicemen and women to defend our nation.

14           There is no such thing as routine training when it  
 15 comes to practicing combat skills. The first training  
 16 opportunities ensure Navy personnel are able to react swiftly  
 17 and decisively in a wide range of potential situations.  
 18 Ensuring Navy forces are prepared for deployment requires  
 19 training where military personnel can learn through practical  
 20 hands-on experience the skills necessary to effectively plan  
 21 and conduct operations.

22           Additionally, advancing technologies require more  
 23 complex and varied training scenarios. The SSTC is unique  
 24 and provides training opportunities essential for the safety  
 25 and readiness of military personnel and the success of our

1 Navy's mission.

2 While fulfilling our mission to train sailors,  
3 protecting the environment is a priority for the Navy. The  
4 Navy is committed to complying with its legal  
5 responsibilities for protecting the physical and natural  
6 environment and has established a successful track record of  
7 environmental stewardship while meeting our mission.

8 To accomplish its environmental stewardship goals,  
9 the Navy implements protective measures on land and in the  
10 water to reduce potential effects on the terrestrial and  
11 marine environment while ensuring public safety and  
12 accessibility.

13 I will now turn the presentation over to  
14 Ms. Delphine Lee from the United States Pacific Fleet, who  
15 will tell you about the Navy's proposed action and give you  
16 an overview of the draft EIS and the environmental analysis  
17 process.

18 MS. LEE: Thank you, Captain Lindsey.

19 My name is Delphine Lee, and I'm the project  
20 manager for the Silver Strand Training Complex environmental  
21 impact statement. I'm here tonight to give you an overview  
22 of the findings contained in the draft EIS. The draft EIS  
23 was prepared by the Navy to comply with the National  
24 Environmental Policy Act, or I'll be calling it NEPA.

25 It's an important part of the Navy's overall

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1 commitment to environmental stewardship as it trains. The  
2 Navy is the lead agency for this environmental impact  
3 statement, and the National Marine Fishery Service is a  
4 cooperating agency on this EIS in addition to their role as  
5 the regulator.

6 The Navy proposes to improve the availability and  
7 quality of training opportunities at the Silver Strand  
8 Training Complex to achieve the required levels of  
9 operational readiness as mandated under federal law. To meet  
10 training requirements, the Navy proposes to, one, continue  
11 current training activities, two, increase training  
12 frequencies and types of training, three, conduct existing  
13 routine training activities at additional locations within  
14 the established Silver Strand range.

15 And just to be clear, the Navy is not proposing to  
16 expand the training area, just where we train within the  
17 existing Silver Strand range.

18 Four, we're proposing to introduce new platform and  
19 equipment into training. And, five, we're proposing to  
20 increase the access and availability of existing beach and  
21 inland areas. The proposed action is needed to accommodate  
22 the future military readiness requirements, including  
23 increased usage of Silver Strand Training Complex, year-round  
24 access to training areas and flexibility in realistic  
25 training.

12

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1 Three alternatives were analyzed in the  
 2 environmental impact statement to help determine the  
 3 appropriate levels and types of training activities required  
 4 for the Navy to meet its needs.

5 Under the no action alternative, the Navy would  
 6 continue training as it has historically at the Silver Strand  
 7 Training Complex. Training would not be different from what  
 8 you've seen over the past five to ten years. This  
 9 alternative provides a baseline for assessing the potential  
 10 environmental impacts of other alternatives.

11 Alternative 1 is designed to meet the Navy and  
 12 Department of Defense's current and near-term training  
 13 requirements, and it is the Navy's preferred alternative.  
 14 Specifically, Alternative 1 proposes to increase the  
 15 frequency of training from roughly 4,000 activities to over  
 16 5,000 activities annually.

17 Two, we're proposing to increase -- introduce new  
 18 types of mine countermeasure, amphibious and special warfare  
 19 training activities. Three, we're proposing to conduct  
 20 existing routine training at additional locations within the  
 21 Silver Strand Training Complex to improve the diversity of  
 22 training.

23 Four, we're proposing to increase -- excuse me --  
 24 introduce new platforms and equipment and to train  
 25 specifically the MH-608 helicopter. We're going to replace

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1 the amphibious assault tracked vehicle with an expeditionary  
 2 assault vehicle and upgrade the existing ship-to-shore fluid  
 3 transfer system.

4 And lastly, Alternative 1 proposes to additionally  
 5 increase the availability and accessibility of beach and  
 6 inland training areas to accommodate the proposed increase in  
 7 training activities. Alternative 1 is the Navy's preferred  
 8 alternative because it would fully support the types and  
 9 frequency of activities required to achieve complete fleet  
 10 readiness training -- readiness and allow the Navy to carry  
 11 out its mission at the Silver Strand Training Complex.

12 Alternative 2 is also designed to meet current and  
 13 near-term training requirements. This alternative includes  
 14 the proposals identified under Alternative 1. Unlike  
 15 Alternative 1, it would also allow year-round access to all  
 16 7,000 yards of ocean-side beaches along the Silver Strand  
 17 Training Complex, north and south, for continuous year-round  
 18 training. California Least Tern nesting habitat at delta  
 19 north and south would continue to be preserved.

20 In preparing the draft EIS, the Navy evaluated the  
 21 potential effects of the alternatives on the marine, natural  
 22 and human environment. The Navy took a comprehensive  
 23 approach in assessing the potential environmental effects on  
 24 16 different physical, biological and socioeconomic resource  
 25 areas. We will present some of these findings here.

14

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1 We encourage you, if you haven't already, to review  
 2 the draft environmental impact statement, which presents the  
 3 findings of the Navy's environmental analysis for each of  
 4 these resource areas. We welcome your comments on the  
 5 findings or the methods of the analysis.

6 For most of the resources analyzed in the draft  
 7 EIS, we found no significant impact or long-term effects from  
 8 the Navy's proposed action. Training at Silver Strand  
 9 Training Complex creates intermittent short-term noise from  
 10 various sources such as aircraft, vessels and vehicles.  
 11 Although these training activities could be audible, they  
 12 would not contribute substantially to the overall average  
 13 sound levels of the area.

14 Increased training activities would increase the  
 15 tempo of intermittent short-term noise. The Navy has  
 16 established protective measures to reduce the effects of  
 17 noise in the surrounding community. It works to minimize  
 18 noise by considering the location and the time of day of the  
 19 training activities.

20 The use of training materials may deposit small  
 21 amounts of material on land and underwater training areas.  
 22 Deposited materials are collected whenever feasible. The  
 23 training [sic] amounts are not expected to affect biological  
 24 or physical resources.

25 Many sensitive species, including endangered or

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1 threatened species, are found on or near the Silver Strand  
 2 Training Complex. For many years, the Navy has taken  
 3 proactive steps to protect the natural resources on its land.  
 4 Threatened, endangered birds on the Silver Strand Training  
 5 Complex include the California Least Tern, the western snowy  
 6 plover and the light-footed clapper rail.

7 Training activities have the potential to impact  
 8 the Least Tern and the snowy plover, both of which nest on  
 9 the training beaches. Since the mid-1980s, the Navy has  
 10 implemented a comprehensive and adaptive natural resource  
 11 management program and spends over half a million dollars  
 12 annually to maintain protection for these species.

13 Thanks to the program, we've seen a dramatic  
 14 increase in Least Tern and western snowy plover nesting on  
 15 the Silver Strand beaches. The nesting continues to expand  
 16 even with the Navy training on the same beaches.

17 No significant impacts on sea turtles or marine  
 18 mammals are expected from the proposed action. Various  
 19 measures will help to protect these species during training.  
 20 For instance, the Navy will monitor for these species and  
 21 halt training as necessary to protect them from harm.  
 22 Effects on other marine biological resources and terrestrial  
 23 biological resources will be minimal, as they are temporary  
 24 and localized.

25 Commercial fishing, sports fishing, diving, boating

16

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1 and other ocean recreational activities occur regularly  
2 within or near the Silver Strand Training Complex. The Navy  
3 understands the concerns the community may have regarding  
4 public access. Training activities will continue to be  
5 conducted in long-established military training areas. The  
6 training areas would not be expanded.

7 The public would continue to have access to public  
8 beach and water areas adjacent to active training. During  
9 some training activities, public access to the training site  
10 may be limited for public safety and security reasons.

11 Significant impacts to cultural resources,  
12 transportation and circulation and socioeconomics are not  
13 anticipated from the Navy's proposed action. The Navy must  
14 comply with numerous federal environmental laws, regulations  
15 and executive orders such as those that are listed here. To  
16 help ensure compliance with these environmental requirements,  
17 the Navy has worked with and will continue to work with a  
18 number of regulatory agencies, including the Fish and  
19 Wildlife Service, the California Coastal Commission and the  
20 Regional Water Quality Control Board.

21 At this time, the Navy has completed the first  
22 three steps of the NEPA process, and we are now in the phase  
23 of providing the draft EIS for public review. Let me review  
24 the progress so far.

25 The EIS was initiated on August 6th, 2001, and the

17

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1 Navy held two public scoping meetings to invite the public to  
2 provide input on the proposed action, the alternatives under  
3 consideration and the environmental resources and issues to  
4 be analyzed. Government agencies, organizations and the  
5 public were encouraged to submit comments throughout the  
6 public comment period.

7 The comments received were considered in the  
8 preparation of this draft EIS that we are discussing here  
9 tonight. We are now at the 45-day public document review  
10 period and at the public hearing. This phase is an essential  
11 part of the NEPA process because it allows the public, such  
12 as yourself, to review the document and comment on the NEPA  
13 process and the Navy's analysis of potential environmental  
14 effects.

15 We encourage you to provide your input today or by  
16 March 9th so that it can be considered for incorporation in  
17 the development of the final environmental impact statement.  
18 All comments will be considered.

19 The Navy is committed to keeping the community  
20 informed throughout the development of this EIS. These  
21 public hearings are just one opportunity to share information  
22 and, more importantly, encourage your feedback and comments.

23 I will now turn the presentation back to Lewis to  
24 describe how to obtain more information and how to comment on  
25 the draft EIS.

18

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1 MR. MICHAELSON: Thank you.

2 In addition to holding these public hearings, the  
3 Navy has established a website to make it easier for you to  
4 find and comment on the environmental document. The address  
5 is up here, but I don't expect anyone to write it down. It's  
6 on virtually everything we've handed out to you tonight.  
7 Just look for it. Okay?

8 The draft EIS will be posted -- is on the website,  
9 and fact sheets are there. Our intent is to post the video  
10 that you were able to see back there, as well as anything  
11 else we can think of, including we're actually videotaping  
12 this public hearing tonight. We're testing out some new  
13 technologies.

14 One of them was the touchscreens for information,  
15 also leaving comments, something new we're trying out. And  
16 this is something that we hope to also provide on the website  
17 to make it as easy as possible for people who are unable to  
18 attend to still see what happened and what were the comments  
19 and presentations at the public hearing.

20 So you may also review a hard copy of the draft  
21 EIS, however, by visiting the Coronado or Imperial Beach  
22 libraries. So if you prefer to do it that way, you can do  
23 it. And the addresses of these libraries are provided on the  
24 NEPA process handouts, which you received when you came in  
25 tonight.

19

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1 Okay. So here's the part about making public  
2 comments. There are several ways for you to submit them.  
3 One of them is by handing them in tonight. One of them is by  
4 making them orally. You can also go on the website through  
5 March 9th and provide them electronically if you want more  
6 time to think about it and digest it. You have up until that  
7 time to do that as well. Comments -- let's see. All  
8 comments must be postmarked or received by March 9th.

9 We're now ready to begin the oral comment portion  
10 of the public hearing. If there is anyone who wishes to  
11 comment, hopefully you have already filled out one of these  
12 cards. If you haven't, she's holding them up back there.  
13 Just raise your hand, and she'll bring you one. You can fill  
14 it out, and I'll add it to the list. I'll be calling on  
15 people in the order in which they signed to speak.

16 To make sure that we get an accurate record of what  
17 you have to say, we do have a court reporter here. She's  
18 making a verbatim transcript of everything said during this  
19 portion of the hearing. So we have a few ground rules just  
20 to try and make sure that this process works effectively and  
21 we get your comments on the record.

22 I'm going to ask you, when I call your name, to  
23 come up to this microphone and speak slowly and clearly  
24 starting with your name and any organization that you  
25 represent. We do not need your address.

20

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1 Second, each person is allotted three minutes to  
2 speak. If you've prepared a written statement, you can turn  
3 it in to the registration table or you may read it out loud  
4 if you can fit it within the three-minute time limit.

5 Please honor any requests that I make for you to  
6 stop speaking when you reach the three-minute time limit. In  
7 order to make that as easy for you to do as possible, when  
8 there's 30 seconds left in your three minutes, I will hold up  
9 this card. Okay. Pretty clear, right? And if you make it  
10 to three minutes, I'm going to hold up this one. And I think  
11 the meaning of that one is pretty clear, too. All right? So  
12 this should allow you to find a comfortable place to wrap up  
13 your comments.

14 And with that, we are ready to begin. I do want to  
15 mention -- I'll read several speakers ahead, because the way  
16 you're seated here, sometimes you got to crawl over somebody  
17 to get to the microphone. So I'm going to read several ahead  
18 so you know where you're going to come up in the rotation, so  
19 to speak.

20 So the first names that I have are: Jim Knox, Leon  
21 Campbell, Jeff Foster, Normandie Trovato-Wilson, Richard  
22 Barck and John Warner. So if you would please do us the  
23 honor of leading us off, Jim Knox. Would you step up here to  
24 the microphone, and again, all we need is your name and  
25 organization, if you want.

1 PUBLIC COMMENTS

2 \* \* \* \* \*

3 MR. KNOX: No organization. My name is James Knox.  
4 I had submitted these already. I do have some things I'd  
5 like to read out loud. One is on .3.5.1.4.2 and .3.5.1.5.2,  
6 the Pacific Ocean, about contaminants, report states that  
7 most of the contamination of the area is caused by sewage  
8 from the river mouth and/or the South Bay ocean outfall.

9 Storm water runoff has a relatively minor influence  
10 on local water quality, which is Table 3.5-5 -- will increase  
11 training at the south complex, cause more contaminants to  
12 reach the ocean by storm water runoff. Rain events occur  
13 mainly in the winter when ocean currents in the area are from  
14 north to south. Were seasonal changes and ocean water  
15 movement taken into account when the finding of contaminants  
16 were formulated?

17 The next is 3.5.1.5.2., Pacific Ocean. I believe  
18 that the Silver Strand State Beach does have day and  
19 overnight use numbers that were not included in this report.  
20 I request in the conclusion that the information presented is  
21 not representative of the use of the municipal beach in  
22 Coronado. The report in other sections extrapolated  
23 information that was used for conclusions without complete  
24 numbers, and I believe you could have done it for that  
25 particular part of the report.

1           The Navy recreational areas, Gator Beach, Fiddler's  
 2 Cove and so on, I don't believe should be included as  
 3 recreational opportunities. They have restricted access not  
 4 open to the general public. So I think you should only  
 5 include those that the general public could go to. I can't  
 6 read it all because we have three minutes.  
 7 3.6.2.3.2 of .2, new training activities will  
 8 increase helicopter use. That's the TRAP. It's N9 on  
 9 Table 2.2. I must disagree with the conclusion the noise  
 10 level will not change. Each flight is a separate event with  
 11 individual consequences regarding sound. Weather,  
 12 temperature, wind direction and pilot skill all contribute to  
 13 each event.

14           Suggesting that the helicopters will always be in  
 15 their assigned flight lanes without data is an assumption.  
 16 The helicopters get out of their flight lanes many times.  
 17 I've noticed this, and I think training people -- willing to  
 18 tell you that. Training evolutions may have variations that  
 19 are not foreseen. This fact needs to be taken into  
 20 consideration when making conclusions.

21           More use equals more sound in the adjacent  
 22 residential areas. Citing the ambient sound of the surf  
 23 supplies no useful data without knowing the size of the surf,  
 24 the direction of the swell, the direction of strength of wind  
 25 and the tidal level. None of this information is contained

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1 in the table. Thank you.

2           Skip the other ones. Good.

3           I do have a mitigation area I think -- that I think  
 4 would be nice, and that is to use the north gate if you have  
 5 more than three vehicles coming to the south complex. Silver  
 6 Strand is a small kind of windy-to-the-left street, and you  
 7 will find that the traffic will back up pretty quickly, and  
 8 they're going in and coming out.

9           Thanks for this opportunity and the assistance of  
 10 forthright answers that were given to me to my questions and  
 11 concerns in the open-house portion of this event. Thank you  
 12 very much.

13           MR. MICHAELSON: Thank you very much. A model  
 14 commenter, stuck right to the three minutes.

15           Okay. Next is Leon Campbell.

16           MR. CAMPBELL: Thank you. I represent the Airport  
 17 Trust. It's a private trust. It has the proprietary  
 18 interest as a licensee under a U.S. patent issued about a  
 19 year ago, and briefly, it represents a new airport for  
 20 San Diego. Notwithstanding the fact we spent over 50 years  
 21 and over \$17 million trying to find an alternate site, this  
 22 is an alternate site. It is feasible, and it will indeed  
 23 work.

24           I've also met with the FAA in Washington, and they  
 25 encouraged us to pursue the concept. And briefly, what it is

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1 is an airport that would be located within south San Diego  
2 Bay, and it would be analogous to an aircraft carrier. It  
3 would have a top level for aircraft operations and a lower  
4 level for parking, terminal, facilities, et cetera. It would  
5 even have an underwater tube for access to and from the  
6 shore.

7 The advantages from an environmental standpoint is  
8 that it observes water areas completely around it. It is not  
9 invading any habitats. It will not cause any excessive  
10 noise. The airplanes will be taking off over and across the  
11 bay. It does not interfere with air traffic, military or  
12 civilian, and basically we've had a lot of good feelings  
13 about what we're trying to do.

14 Tonight, I discovered that the airport, for its  
15 location, will be invading, if you will, part of the bay area  
16 for amphibious training for the so-called quiet-water  
17 training, and that would be the delta areas and the echo  
18 area.

19 Now, logically, we should find an alternate site  
20 for our airport so we're not interfering with that area.  
21 Unfortunately, there is no alternate site. We have the only  
22 site in San Diego County that's feasible. So we would  
23 respectfully ask that an alternate site be generated for at  
24 least part of your in-bay amphibious operations.

25 And I think, somehow, we kind of balance the

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1 interest so that that can happen. And otherwise, we are very  
2 much in favor of what's being done. We think that there's no  
3 environmental complex whatsoever between us. And as an  
4 incidental benefit, we'd like to create a second entrance to  
5 San Diego Bay so that the amphibious base can go ahead and  
6 get their vehicles or vessels out into the ocean and back  
7 very easily.

8 The airport does respect the amphibious security  
9 zones, so we're not involved there. And we're just down to  
10 an old-fashioned tradeoff where we think that the alternate  
11 site for the amphibious training in-bay, there is no  
12 alternate site for a new airport, which incidentally will be  
13 billions of dollars for the economy of the South Bay.

14 MR. MICHAELSON: Thank you.

15 The next speaker is Jeff Foster.

16 MR. FOSTER: I'm a resident of north IB, and so I  
17 think that this increase would affect us the most, living up  
18 in that area. The increase in activities of shotgun blasts  
19 from 150 to 1400, helo sorties from 778 to 2,220, I think.  
20 And I guess that, in general, it's a 48 percent increase in  
21 sound-generating activities. We definitely will notice that.  
22 A lot of them are at night, and it's -- we can hear it.

23 Let's see. I -- so I -- I just implore you to  
24 choose the no action alternative. I think that us residents  
25 of IB should be considered first and foremost in this

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1 decision, because I think we're going to be affected the  
2 most.

3 Also, we -- one of the -- one of the most coveted  
4 things about IB is the wildlife and the wildlife along the  
5 Silver Strand beach adjacent to the south training facility  
6 is -- it's really nice down there, and reading this, I can  
7 see there's a pretty good impact to that.

8 And I just ask that you choose the no action  
9 alternative. Thank you.

10 MR. MICHAELSON: The next speaker is Normandie  
11 Trovato-Wilson.

12 MS. TROVATO-WILSON: I'll move it back.

13 I'm Normandie Trovato-Wilson, and I'm here with  
14 San Diego Audubon. Some of the concerns Jim is going to be  
15 talking about in a little bit, my personal and biggest  
16 concern with the increased level of activities is the  
17 introduction of training within the vernal pool areas. These  
18 are highly sensitive, complex ecosystems, and I have no doubt  
19 about the Navy's commitment after speaking with Delphine last  
20 night about protecting the western snowy plovers, the Least  
21 Terns -- I'll get into that later.

22 But whereas the Navy can very easily barricade off  
23 an area around the western snowy plover nest, it's not quite  
24 so easy to determine what the impact is going to be once foot  
25 traffic is let into the vernal pool areas, and these are

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1 ecosystems of which 90 percent have been destroyed in  
2 California.

3 An alternative for the vernal pools, since the  
4 complex ecological effects seem to be unstudied and  
5 unpredictable, would be to maybe phase in some of the  
6 training around a vernal pool that is in poor condition and  
7 track what happens in that vernal pool. You may have  
8 unexpected results, and it may be better. It could be worse.  
9 We don't know.

10 The potential down-listing of the California Least  
11 Tern presents a very bad thing in terms of Audubon  
12 perspective. We don't really know what the cumulative impact  
13 is going to be on both the western snowy plover and the Least  
14 Terns. There don't seem to be a real quantification of the  
15 sets of numbers. We heard an estimated take number on the  
16 high side. We didn't hear one on the low side. There wasn't  
17 one in the middle either, and I find that a little  
18 concerning.

19 It seems that an option could be to slowly phase in  
20 some of these alternatives, such as phasing in the one lane  
21 for six months out of the year and seeing how that goes,  
22 et cetera. And I didn't see that as part of the plan. And I  
23 think that maybe phasing in some of the alternatives and  
24 studying the effects could provide the Navy with alternatives  
25 to mitigate what may or may not happen.

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1           Because as we've known from some of these, many,  
2 many, many of these experiments, what happens when we start  
3 dealing with these issues is very, very unpredictable. And  
4 that's all. Thank you.

5           MR. MICHAELSON: Thank you very much.

6           I'm ready to read ahead a few more speakers, so you  
7 can be prepared. Richard Barck is going to be next, followed  
8 by John Warner, Jim Peugh, Rina Kelley and Ed Sorrels.

9           Richard?

10          MR. BARK: She didn't adjust it for me, did she?

11          MR. MICHAELSON: You'll have to bring that up.  
12 Yeah, that needs some work. That ain't going to work. Can  
13 somebody help him with that? Thank you. There we go. Thank  
14 you.

15          MR. BARK: Richard Barck, and I guess my  
16 description would be local resident. I have a couple of  
17 thoughts here. And reading through the report -- a lot to  
18 read, a lot of work went into that -- some of the things that  
19 I would look at from a statistical standpoint are sound  
20 levels, which you always describe as average. I assume that  
21 means over a 24-hour period?

22          What we're mostly interested in when we live  
23 locally and especially at night is how loud it is for very  
24 brief periods. If you dampen it out over a day, yeah, it's  
25 not very loud, but it's very loud when it happens.

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1           For us, especially if we have any doors open facing  
2 west, helicopters go by. You cannot hear the TV. In the  
3 middle of the night, if you have a few sorties -- and a  
4 sortie, as I understand it, contains more than one helicopter  
5 in a formation -- they get very loud. They're only there for  
6 a few minutes, but if it wakes you up, you don't go back to  
7 sleep immediately.

8           And they happen throughout the night. My  
9 impression is that many of those flights can be more  
10 offshore, because I believe they're not attacking the shore  
11 or part of a mission. That would be a comment on that.

12          We have very quiet nights in this area. At night,  
13 we hear the surf. We like to hear the surf. We like to have  
14 the doors open to do that. We would not like to have to  
15 close them to shut out the noise. The second thing is that  
16 sometimes there's an offshore breeze. We hear the traffic on  
17 I-5 and the trains across the bay. It's quiet down here. We  
18 would like that to be maintained.

19          And basically, I am talking about the impact of  
20 your Lanes 11 through 14 or your white and purple. I don't  
21 know how you'd like to call them.

22          Secondly, been a big effort by local people, as  
23 well as Fish and Wildlife and the state parks, to further  
24 develop the snowy plover -- western snowy plover nesting  
25 areas. Some of those in Silver Strand State Beach south are

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1 immediately adjacent to all SSTC south.  
2 As I looked at the maps, which are very large scale  
3 or small scale that you have on there, it actually appears  
4 that you've extended into what was part of Silver Strand  
5 State Beach for some of those zones. It is an area that we  
6 had good fledglings and nests actively occupied by snowy  
7 plovers. Department of Fish and Wildlife has the statistics,  
8 and I'm sure they will make it available to you.

9 MR. MICHAELSON: Thank you very much.

10 The next speaker is John Warner.

11 MR. WARNER: Yes, my name is John Warner. I'm a  
12 resident and a proud taxpayer.

13 Aside from these issues mentioned, I have two very  
14 serious concerns. For the first, I'd like to go back to  
15 December of 2008. There was an F18, left the carrier  
16 offshore, developed engine problems. He was instructed by  
17 commanders to bypass the open runway at North Island Naval  
18 Air Station. He was ordered to attempt a landing at Miramar  
19 Marine Air Station. We all know the catastrophe that ensued.

20 My point is that we need hyper-efficient  
21 communication, coordination and cooperation between the Navy  
22 and the Marines. Commander Perry in the paper today stated  
23 we need a very realistic training environment. That would be  
24 afforded by the vast wide open spaces in Camp Pendleton, not  
25 an area sandwiched between two civilian populations and youth

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1 camps.

2 Have I cut off?

3 MR. MICHAELSON: No.

4 MR. WARNER: My second major concern, anybody  
5 that's been in this area for a while knows that in the waters  
6 out here, we have viral. We have chemical. We have  
7 bacterial pollutants that contaminate this water for weeks on  
8 end. That's -- in an El Nino cycle, that's magnified.

9 Now that's not to mention the potential catastrophe  
10 if Rodriguez Dam fails. The structural integrity of  
11 Rodriguez Dam is at question. Built in the early '30s, it  
12 would not take much of a man-made or natural event. We've  
13 been having a little movement on the earth here recently. I  
14 guarantee you it wouldn't take much for Rodriguez to pop, the  
15 waters out here to be contaminated for months.

16 Now I've been told one SEAL team member, that's  
17 about \$200,000 to train that man. That's quite an  
18 investment. That's quite a valuable asset. To put that  
19 valuable asset in an environment where he is exposed or she  
20 is exposed to hepatitis, waterborne pathogens, parasitic  
21 amoeba, that is unconscionable. It's negligent. It's  
22 reckless.

23 To expand -- yeah, give me the 30.

24 To expand this facility, it may be comfortable and  
25 convenient. You may be able to sleep in your beds at night,

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1 but I sincerely believe it's compromising the readiness of  
2 our troops. Pendleton, that vast area, would provide the  
3 opportunity. That's the resource that needs to be explored.  
4 Thank you.

5 MR. MICHAELSON: The next speaker is Jim Peugh.  
6 You don't have to adjust that. Just pull the mic down a  
7 little bit. There you go.

8 MR. PUGH: You probably should order speakers by  
9 height, and so we can gradually make it up or down.

10 I'm Jim Peugh. I'm the conservation chair of the  
11 San Diego -- is this working -- I'm the conservation chair of  
12 the San Diego Audubon Society. We appreciate the Navy's  
13 long-term work to protect the Least Terns and snowy plovers  
14 on the strand. And we understand, you know, the desire to  
15 have more training operations, but we think you can do it  
16 with considerably less impact to the environment.

17 And we'll mention a little bit -- our letter will  
18 try to be more specific, but it is interesting that you're  
19 working to increase the training capability where, just a few  
20 years ago, the Navy was looking to put a golf course on the  
21 same area, also in the city of Coronado, which seems ironic.

22 The Least Terns, you know, some of your data shows  
23 that the populations are really high. It is important to  
24 notice the complementary number, that the reproduction of --  
25 the successful reproduction has been plummeting for the last

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1 few years. So Lest Terns are not the least bit, you know, in  
2 a good position for the future.

3 The purpose of the Endangered Species Act isn't to  
4 let species hang on for decade after decade. It's for  
5 recovery, and I hope that you'll orient, you know, your  
6 actions and your plan to enable the recovery of the Least  
7 Tern, and I don't think that the way it is set up it does  
8 now.

9 The project -- I understand that -- that --  
10 figuring out what the -- the take impact is difficult, but it  
11 just seems like you need to have better quantification of  
12 what the take is. You run some models, apparently run  
13 worst-case models, and that's really misleading to the public  
14 and decision-makers when you're only saying this is the worst  
15 case when there's something significantly less than that.

16 You really need to say what the uncertainty  
17 intervals in the modeling is. You need to come up with a  
18 worst case, an expected value and a best case and -- so  
19 people at least know what -- you know, how precise your  
20 calculations are. And you don't have that.

21 And the same thing is true of your mitigation  
22 measures. The mitigation measures are really kind of fuzzy.  
23 They're not mitigation in the sense that I've ever seen  
24 before in any other project, and I've reviewed hundreds of  
25 EISs and EIRs.

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1           You need to be able to quantify what the benefit is  
2 going to be to the species, and you really need to show how  
3 the difference between the impact and the benefit is going to  
4 facilitate the recovery of the species, and I don't -- you  
5 know, to me, I don't think you've reached that level.

6           And then as Ms. Wilson mentioned, the services  
7 working on -- for some strange reason is working on  
8 down-listing the Least Tern, which seems to be the most  
9 inappropriate action I've ever heard of. But you need to  
10 look to see what the cumulative impact of down-listing will  
11 be with your project.

12           We're really concerned also with the vernal pools.  
13 I don't know if you ever had to do trail maintenance, but  
14 trails are an increasingly degrading thing. They just go  
15 deeper and deeper the more years it's used. I don't know  
16 what's going to happen to the contours of vernal pools, but I  
17 think that you need to take up a pool, as Ms. Wilson said,  
18 and do a lot of experiment over a lot of years before you  
19 actually start manipulating.

20           That's the most endangered habitat type in our  
21 entire region. And so I just hope that you'll work hard --  
22 and another thing, too, is that the staff so far in their  
23 command has been very serious about the environment. But  
24 people change, and I want this project to be so they really  
25 will protect the environment, not just depending on the

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1 personality of who's in charge. Thank you.

2           MR. MICHAELSON: Thank you.

3           The next speaker I'm going to read ahead is Rina  
4 Kelley -- and if I mispronounce anyone's name, I apologize --  
5 Ed Sorrels, Van Collinsworth, RG Head and Cindy Buxton.

6           All right. Rina?

7           MS. KELLEY: Yes, hello. I'm an inhabitant of the  
8 north area of Imperial Beach. I am not a snowy plover --

9           MR. MICHAELSON: Could you state your name for us,  
10 please.

11           MS. KELLEY: Oh, Rina Kelley. I'm not a snowy  
12 plover or a fairy shrimp. However, I am an inhabitant. I  
13 don't feel also that you have mitigated enough sufficiently  
14 for me, being north of Imperial Beach, your mitigation of  
15 what you intend to do.

16           I would like to inform you at this time about your  
17 lack of attention and the dangerous disregard of your  
18 property in Imperial Beach that has put the inhabitants of my  
19 city into a dangerous, threatening activity -- subject --  
20 being subjected to your dangerous, threatening activity for  
21 years.

22           I would like to put you on notice first that your  
23 steel wall outside the Camp Surf fence at the beach has huge  
24 holes, serves no purpose except to attract children, has  
25 become a serious hazard to the safety of us. Jagged, rusted

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1 steel rim and bottom are hazardous on a daily basis. It is  
2 an accident waiting to happen for children.

3 MR. MICHAELSON: Rina.

4 MS. KELLEY: Yes.

5 MR. MICHAELSON: You're going to have to slow down  
6 a little bit. I can tell the court reporter is not getting  
7 it. Sorry. Just a little bit. She's really good, but not  
8 that good.

9 MS. KELLEY: She can paraphrase it. This is not  
10 poetry. So -- thank you, though.

11 Anyway, okay. It's a hazard, anyway. And it's --  
12 for about ten years, it's been a hazard there with holes,  
13 jagged. So would you have us wait another ten years to  
14 remediate and remove it? Hopefully not, that you are now  
15 formally put on legal notice with legal effect.

16 MR. MICHAELSON: Thank you.

17 MS. KELLEY: Camp Surf -- Camp Surf opened onto the  
18 street in a residential area for years. You did nothing  
19 about it. It ran over the animals on our street, one animal  
20 in particular. I called the Navy Chaplin, and the people  
21 were distraught. And hit a child in front of my home. It  
22 was not -- you did nothing. We are the ones that had to make  
23 that camp in the same manner that I just served you with a  
24 notice to move that gate to the other end.

25 I want to tell you that this EIS in and of itself

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1 is like the nose's camel -- the camel's nose in the tent's  
2 door. On SSTC northeast, you do a little bit more -- you  
3 could request more activity, permission for an EIS. Then you  
4 do it at NASNI. Then you do it in the south where the Navy  
5 SEALs are. It's an aggregate effect.

6 The aggregate effect is that, gentlemen, we live in  
7 a war zone. I live in a war zone in the summer where Navy  
8 SEALs shoot guns and explode munitions outside all night. I  
9 can't sleep. Could you please put a time limit on this  
10 activity. Your EIS specifically addresses the intensity, the  
11 intervals and another thing -- the intervals, the intensity  
12 of the activity.

13 We'd like to know the intervals. I'd like to have  
14 a -- you know, a timetable so that I can leave town. Also,  
15 in addition, the planes that NASNI fly overhead doing these  
16 endless, mindlessly seeming exercises -- I was an Air Force  
17 officer. I was on Air Force bases. I don't understand how  
18 the Navy can destroy a city like this.

19 You shouldn't even be here. This is property that  
20 is coveted south shore property in the south -- Southern  
21 California, and, you know, I really hope that you could  
22 provide us with some timetables at least in mitigation of  
23 this. And, you know, go to the Philippines. General  
24 MacArthur took care of the Japanese. You don't have to worry  
25 about them over there, unless you drive a Toyota. Thank you.

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1 MR. MICHAELSON: Our next speaker is Ed Sorrels.  
2 MR. SORRELS: I can tell already I'm not going to  
3 be a happy speaker for you folks. The captain mentioned --  
4 oh, my name is Ed Sorrels. I'm a Marine veteran. I've lived  
5 in Imperial Beach almost 40 years, two different places, one  
6 over on Hemlock next to the axillary landing field, and now I  
7 live on the north side of Imperial Beach.  
8 I've heard floating airports. I've heard "I can't  
9 sleep at night." I've heard birds and vernal pools and one  
10 thing and another. The one thing I haven't heard addressed  
11 was, the captain, when he gave his introduction, talked about  
12 the importance of realistic training and surviving a combat  
13 situation. And there's nobody here yet in this whole group  
14 that has addressed the improvement of training, proportioned  
15 it to the survival abilities of a marine or a sailor in  
16 combat situations.  
17 Now, I'm sorry you can't sleep at night. Neither  
18 can I. But damn it, that's the sound of freedom. And to --  
19 I'm for option one. There's a sign down here at MCRD over  
20 the door of the drill instructor's training facility, and  
21 what that sign says is "Let no man's ghost say to me 'If only  
22 you had done your job,'" and that applies to all of us now.  
23 And that's all I have to say.  
24 MR. MICHAELSON: Thank you.  
25 Our next speaker is RG Head. Oh, excuse me. I had

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1 one stick to another one. It's Van Collinworth. Sorry.  
2 MR. COLLINSWORTH: Hi. I'm Van Collinworth, and  
3 I'm the conservation -- actually vernal pool conservation  
4 director for a coalition of environmental groups. Those  
5 include the San Diego Chapter of Sierra Club, the San Diego  
6 Audubon Society, Center for Biological Diversity, the  
7 California Chaparral Institute, and I'm most known if it  
8 involves Santee. I actually live out in Santee.  
9 The issue I wanted to most focus on is the vernal  
10 pool impacts. And, first, let me say I appreciate the fact  
11 you've already acknowledged there's not going to be any  
12 activity during the wet seasons. But I am still concerned  
13 that the impacts -- the foot traffic during the dry periods  
14 would result in mortality of endangered -- the endangered  
15 San Diego fairy shrimp.  
16 So the best, I guess, opportunity or best route is  
17 actually to avoid those vernal pools possibly with some  
18 fencing or signage to identify the resource and so there  
19 aren't any impacts there whatsoever.  
20 Now, the previous speaker made an excellent point  
21 about readiness and the importance of training, and we  
22 certainly appreciate that. And so if you were to find in  
23 your analysis that there couldn't be avoided -- even though  
24 we still feel that that foot traffic will create a  
25 significant impact, we'd like to see that mitigated

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1 elsewhere.

2 Now one of the things I have with me tonight is a  
3 map of vernal pools actually that are directly adjacent to  
4 Marine Corps Air Station Miramar on Bonita (phonetic) Ranch.  
5 That property is for sale. It has a wealth of vernal pool  
6 resources. It's a perfect candidate for the readiness and  
7 environmental protection initiative that the military has,  
8 the buffer program. So I would like to see that given some  
9 serious consideration in this EIS and see if that might  
10 actually meet the needs for mitigation.

11 Thank you very much. And if I could leave the map?

12 MR. MICHAELSON: Yes. Thank you.

13 Next is RG Head.

14 MR. HEAD: Good evening everyone. My name is  
15 RG Head, and I'm a resident of Coronado Cays. I've spent a  
16 lot of time in Imperial Beach. I have a Bachelor of Science  
17 degree in engineering and a Ph.D. in public policy. For the  
18 past 20 years, I've worked in the environmental planning  
19 industry, and now I'm a private citizen.

20 I've observed tonight's comments are mostly  
21 negative with the exception of Ed Sorrels', and I would like  
22 to add a few to provide some balance. First of all, naval  
23 training is critical. It's absolutely critical to our  
24 survival as a country just like it is for the Olympics.

25 In fact, the phases are very similar. Basic

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1 training is physical conditioning just like for a ski jumper.  
2 Pre-deployment training for combat is indispensable to train  
3 young men and women before they go to Iraq and Afghanistan.  
4 And thirdly, training between deployments is very important  
5 to get new technology, new ideas, constantly improved  
6 communications.

7 Secondly, training area environmental impact  
8 statements are very unique. Training areas, you can't move  
9 the area. The area is where it is. I think the 60-year  
10 experience of the Navy in this area states for itself that if  
11 the training could have been moved to Miramar or to Camp  
12 Pendleton, it would have been done so long ago.

13 I'll say something about the ease of which you  
14 throw off "use Camp Pendleton." Camp Pendleton's 17 miles of  
15 beach are so critically inhabited by endangered species, that  
16 less than five miles are available for continuous Marine  
17 Corps training. They're not going to walk them another 5,000  
18 operations up there. There is no better place for this type  
19 of training in the bay and in the ocean than this location.

20 Thirdly, the constraints that are put upon the  
21 Navy and the Marine Corps in their training are already  
22 immense. Yes, there are environmental issues. Yes, there's  
23 public concern over noise and economic impact. But most of  
24 the -- some of the speakers that you have seen are  
25 single-issue advocates. They're worried about a vernal pool,

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1 or they're worried about the snowy plover.

2 The Navy does not have the luxury to be a  
3 single-issue advocate. It is like the rest of us. We are  
4 multi-faceted. We have to deal with all the issues at the  
5 same time and make tradeoffs. As the Supreme Court -- as the  
6 United States Supreme Court ruled in 2008 in "NRDC versus the  
7 U.S. Navy," we and the citizens must give adequate attention  
8 to the common defense, and that's what I see done in this  
9 EIS.

10 Training and environmental stewardship are  
11 compatible, and I believe the Navy has achieved a good  
12 balance in this set of analysis. Thank you very much.

13 MR. MICHAELSON: The last speaker for whom I have a  
14 card is Cindy Buxton. If there is anyone else that would  
15 like to speak, again, if you hold up your hand, someone will  
16 bring you a card, and we'll get you in. We want everyone to  
17 speak who wants to.

18 MS. BUXTON: Hi. My name is Cindy Buxton. Some of  
19 you know me from Mountains and Waterfalls. I've made some  
20 observations for stuff. I cannot know all of your point of  
21 view. I think that's obvious, so thank you very much for the  
22 Navy keeping the good communication over the years.

23 And with all due respect, and I most definitely do,  
24 I'm going to make a few observations from my point of view  
25 since I have a hard time seeing all of yours. The training

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1 has already been very, very effective, and I think we're all  
2 very grateful since World War II and Vietnam and Korea and  
3 Desert Storm.

4 So I look at the two miles up there as I drive to  
5 work every day, and I look at the half mile of particularly  
6 critical areas down here, and I go "Why do we really need  
7 this?" I don't -- I haven't yet really seen the compelling  
8 argument to do some of the things that they want to do.

9 And they talk about the criticality of training and  
10 the unique area that -- that area up in Coronado seems to me  
11 to be very similar as a beach to this one, the one difference  
12 being is that this beach has natural dunes, and it's one of  
13 the few places in Southern California where you have a long  
14 wide swept area of natural dunes.

15 I moved down here, believe it or not, to Silver  
16 Strand and to Imperial Beach specifically because that was  
17 such a gorgeous, gorgeous beach. And I certainly do think  
18 that we should share our beach where we can or they with us,  
19 as you guys are Navy.

20 This town has worked very hard, I've noticed. I  
21 thought it was pretty wonderful anyway, though they've worked  
22 very, very hard to improve it and improve property values,  
23 and I think a lot of heavy artillery will probably compromise  
24 that considerably.

25 The one thing I noticed in the EIS was that the

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1 camp, Camp Surf, apparently hosts 10,000 children in a year,  
2 and I don't think when they originally leased that that they  
3 were thinking of a lot of blasting. So what I saw in there  
4 was that the Navy holds that property in a fee simple, and I  
5 looked this up and noticed that fee simple can be fee  
6 differential or circumstantial subsequent, and I'm wondering  
7 if there are any extra contingencies on that.

8 The blasting does affect people and children. This  
9 is where my dog went through a window one night when she got  
10 scared, and I think children would, too. So I would ask you  
11 to consider that and modify and attenuate for the birds and  
12 the blasting in this area. Thank you.

13 MR. MICHAELSON: Thank you very much.

14 Do we have anymore cards that have been turned in?  
15 Corey, anybody?

16 Okay. What oftentimes happens at this point in the  
17 evening is that someone has gotten inspired by something  
18 someone else has said, so I want to make sure that before we  
19 adjourn here, is there anyone else here who wanted to take  
20 advantage of this opportunity to make an oral comment,  
21 whether they filled out a card or not? If not -- yes. Would  
22 you like to come up? Come on up. We'll just give you a card  
23 and have you fill it out afterwards. How's that?

24 MS. DAVIS: That's fine.

25 MR. MICHAELSON: All I need is your name.

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1 MS. DAVIS: I'm Shannon Davis, and what's on my  
2 mind is the fact this is an environmental impact statement.  
3 It's a draft. And we're focussing on the environmental  
4 issues and NEPA compliance. This is not about patriotism.  
5 This is not about being -- protecting our freedom. This is  
6 about saving endangered species on critical habitat that  
7 maybe apparently should have been paid more attention to by  
8 U.S. Fish and Wildlife.

9 And possibly some of these areas should have been  
10 sanctioned as refuge, study areas by U.S. Fish and Wildlife  
11 to be held under their jurisdiction, not in cooperation with  
12 the U.S. Navy.

13 MR. MICHAELSON: Thank you very much.

14 Anyone else? Sure. Come forward.

15 MR. FELTIS: My name is Edward Feltis, and I'm a  
16 resident of Imperial Beach. I've been coming down here since  
17 1960 walking the strand, and this is a single -- single-cast  
18 issue. I'm not sure exactly how you put it, but  
19 single-person issue.

20 Upon reading the impact statement, I noticed that  
21 the tide flats are public, and I'm a pretty regular walker.  
22 My wife takes me down to Silver Strand. I walk up to the IB  
23 pier. I have no problems with -- and according to the  
24 statement, most of the training that's going to take place  
25 will take place for an hour or two hours, eight hours at the

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1 most, things will be posted. I have no problem with walking  
2 the beach, running up to a sign that says "Restricted area  
3 for the next 48 hours. We're going to be doing this. We're  
4 going to be doing that," turn around, walk right back to IB.

5 But my concern is that in 11 through 14, we'll get  
6 a sign put up like we had put up two years ago that said  
7 "Nobody past this point. This is naval property. You can't  
8 walk down to the Silver Strand," and what everybody did was  
9 ignore it. If they didn't see anything going on, they  
10 ignored it.

11 Readiness training, all part of that. I've got two  
12 kids that work -- or live down the hall from me that are in  
13 SEAL Team 3, and I want those guys ready, professional and  
14 able to do their job whatever it takes. I just want a little  
15 assurance that -- on those days when nothing's going on, I  
16 want to walk the Silver Strand between the state park and  
17 here -- I won't be in any kind of jeopardy or I won't be in  
18 the way of any activities. Thank you very much.

19 MR. MICHAELSON: Thank you. If we could get you to  
20 fill out a card, we'd appreciate it. Thank you.

21 Anyone else? See, I told you a few people would  
22 get inspired, didn't I? Anyone else?

23 If not, if you look behind you, you'll see all  
24 those eager faces at all those poster stations. They just  
25 can't wait for you to come back and ask them more questions.

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1 And since we're here until 7:30, we're happy to do that.

2 So we're going to adjourn, and if anyone else wants  
3 to make oral comments, let me know and we have -- we can  
4 accommodate that.

5 All right. Yes, sir?

6 MR. SORRELS: I'd just like --

7 MR. MICHAELSON: Oh, you know what?

8 MR. SORRELS: Can you use my card again?

9 MR. MICHAELSON: For a second helping?

10 MR. SORRELS: Yeah.

11 MR. MICHAELSON: Let me confer. Yeah, sure. Go  
12 ahead. I'll give you another three.

13 MR. SORRELS: Okay. I won't --

14 MR. MICHAELSON: I don't think you used up your  
15 full three the first time.

16 MR. SORRELS: Okay. Summer of 1957, I was flown in  
17 from Hawaii to Camp Pendleton, and I worked all that summer  
18 as a lifeguard on the beaches there by Del Mar where they do  
19 the Amtrak and rubber boat training for the Marines. And I  
20 can assure you of one thing: The environment here on the  
21 strand is entirely different than the beach approach  
22 environment in Camp Pendleton.

23 You go from water to a very small beach, and then  
24 you start inland, and it goes uphill. You don't go from  
25 water to beach to water. And it is -- to compare the Silver

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1 Strand to Camp Pendleton training areas is apples and  
 2 oranges. The two don't compare at all.  
 3 MR. MICHAELSON: All right. Thank you.  
 4 All right. So we're going to be here until 7:30.  
 5 We're going to adjourn and ask you to ask anymore clarifying  
 6 questions that you want at the poster stations. Thank you  
 7 very much.  
 8 (Hearing adjourned at 7:09 p.m.)  
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1 STATE OF CALIFORNIA  
 2 COUNTY OF SAN DIEGO  
 3  
 4 I, Regina L. Garrison, a Certified Shorthand  
 5 Reporter for the State of California, CSR No. 12921, do  
 6 hereby certify: That the proceedings were taken before me at  
 7 the time and place herein named; that the said proceedings  
 8 were reported by me in shorthand and transcribed through  
 9 computer-aided transcription, under my direction; and that  
 10 the foregoing is a true record of the testimony elicited at  
 11 said proceedings to the best of my ability.  
 12  
 13 I do further certify that I am a disinterested  
 14 person and am in no way interested in the outcome of this  
 15 action or connected with or related to any of the parties in  
 16 this action or to their respective counsel.  
 17  
 18 In witness whereof, I have hereunto set my hand  
 19 this \_\_\_\_ day of \_\_\_\_\_, 2010.  
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 REGINA L. GARRISON, CSR NO. 12921

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REPORTER'S TRANSCRIPT OF PUBLIC HEARING

RE: SILVER STRAND TRAINING COMPLEX  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

WEDNESDAY, FEBRUARY 24, 2010  
CORONADO, CALIFORNIA

REPORTED BY REGINA L. GARRISON, CSR NO. 12921

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REPORTER'S TRANSCRIPT OF PUBLIC HEARING,  
commencing at the hour of 4:00 p.m., on Wednesday,  
February 24, 2010, at 1845 Strand Way, Coronado, California,  
before Regina L. Garrison, Certified Shorthand Reporter in  
and for the State of California.

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1 (4:32 P.M.)

2 ORAL COMMENTS

3 \* \* \* \* \*

4 ANONYMOUS SPEAKER: Basically, I understand that  
5 the Navy told me that the species are thriving where they're  
6 doing training. I think that's great. My concern is that a  
7 lot of environmental groups are not doing their homework and  
8 not paying attention to what the federal people are telling  
9 them.

10 For example, my son works for National Marine  
11 Fisheries, and the environmental groups don't read the  
12 reports that are coming out. They need to do their homework  
13 instead of filing lawsuits to stop everything. So maybe  
14 there's a middle ground here where everybody has to meet.  
15 You know, people have to pay attention to each other.

16 They're wasting taxpayers' money. We shouldn't  
17 have to take nine years to find something out and figure out  
18 a scope of work. We need to talk to each other and put aside  
19 our emotional differences. Amen.

20 \* \* \* \* \*

1 (6:03 P.M.)

2 WELCOME TO PUBLIC HEARING

3 \* \* \* \* \*

4 MR. MICHAELSON: Good evening and thank you for  
5 coming tonight. My name is Lewis Michaelson, and I will be  
6 the moderator for tonight's hearing on the Navy's Silver  
7 Strand Training Complex environmental impact statement, or as  
8 you will hear it referred to for the rest of this evening,  
9 the draft EIS.

10 Here to receive your comments are Captain Yancy  
11 Lindsey, Commanding Officer at Naval Base Coronado, and then  
12 Delphine Lee, project manager for the Navy Pacific Fleet.  
13 Mr. Kent Randall -- I think I see him over there. He is  
14 raising his hand -- is the project coordinator for the Naval  
15 Facility Engineering Command, and his is the actual primary  
16 point of contact and address that you see on everything for  
17 mailing your comments to.

18 Let's look at the agenda for tonight. Hopefully  
19 you have all had the opportunity, or most of you did, to talk  
20 to the many knowledgeable experts who are at the poster  
21 stations during the open house. The primary purpose of this  
22 portion of the hearing is for the panel members to listen to  
23 your comments firsthand. They will not be answering  
24 questions during this phase of the proceedings.

25 Any comments and questions during this phase will

1 be addressed in the final EIS. So in terms of the agenda,  
2 after I've finished this introduction, Captain Lindsey will  
3 give a brief overview of the Navy Silver Strand Training  
4 Complex and training activities. Then Ms. Delphine Lee will  
5 brief you on the environmental impact analysis process and  
6 summarize the results reported in the draft EIS.

7 The last item on the agenda, however, is really the  
8 most important. The public comment session is your  
9 opportunity to provide information and make statements for  
10 the record. Your input ensures the decision-makers can  
11 benefit from your knowledge of the local area and any  
12 environmental effects you think may result from the proposed  
13 action and its alternatives.

14 Keep in mind, the EIS process is intended to ensure  
15 the decision-makers will be fully informed about the  
16 potential environmental impacts associated with the various  
17 alternatives before they decide on a course of action. To  
18 request an opportunity to make a verbal comment during  
19 tonight's hearing, please fill out a speaker comment card. I  
20 have several filled out already. If you decide you want to  
21 speak after we've begun, just raise your hand, and someone  
22 will bring you a comment card from the registration table.

23 I call on people in the order in which they've  
24 signed up. Every speaker, including public officials,  
25 organizational spokespersons and individuals, will have three

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1 minutes each to provide his or her comments. If you do not  
2 feel comfortable standing up here tonight, there are several  
3 other ways you can make the statement.

4 We have touchscreen screens back there that you can  
5 use to enter your comments. You can hand in written comments  
6 here tonight. You can mail in written comments, or you can  
7 use the project website to provide written comments as well,  
8 as long as they're postmarked or received by March 9th.

9 I also have a court reporter here. She's here to  
10 make a verbatim transcript of any comments offered orally.  
11 Keep in mind, the written comments have the same  
12 consideration as verbal comments, so there's no obligation to  
13 speak verbally if you're more comfortable doing it in written  
14 form. Now it is my pleasure to introduce Captain Lindsey.

15 CAPTAIN LINDSEY: Make sure I get this figured out  
16 where you can actually hear me. Is the lighting on me when I  
17 stand back here better? I thought it might be, so I'm going  
18 to move this back. Is that better? Good. Make this command  
19 decision here. I'm just going to take this out. That way, I  
20 don't have to lean over.

21 MR. MICHAELSON: Are you sure, because I can get it  
22 down to your mouth if you want.

23 /////

24 /////

25 /////

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1 stationed in the San Diego metropolitan area. The Navy also  
2 conducts basic new recruit training on the SSTC. This  
3 training is conducted in formal courses with syllabi and  
4 instructors, including both classroom and fieldwork. For  
5 example, all SEAL recruits must complete the basic underwater  
6 demolition training program on the Silver Strand Training  
7 Complex to be qualified as a Navy SEAL.

8           There are over 70 different types of training  
9 activities that occur on the SSTC. One of the most common  
10 activities is the -- is basic physical fitness, that is,  
11 running, exercising and swimming. Personnel may also learn  
12 how to operate different small Navy vessels and maneuver them  
13 across calm water or more challenging surf conditions.

14           Advanced students learn how to collect intelligence  
15 through reconnaissance, beach raids and assault coordination.  
16 Personnel also learn to seek, find and identify simulated  
17 mines to include dismantling and neutralizing them. There  
18 are also logistics-related training. Personnel work together  
19 to move equipment, vehicles and supplies from a large  
20 offshore ship to onshore areas. This may involve shuttling  
21 craft and people between the ship and/or reeling out hoses to  
22 transfer fluids from ship to shore.

23           The Silver Strand Training Complex has a unique  
24 combination of attributes that make it an ideal venue to  
25 train servicemen and women in amphibious warfare, special

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1 warfare and mine warfare operations. SSTC contains large  
2 stretches of water, beach and inland areas. Access to both  
3 the calm bay and rough ocean allow personnel to initiate  
4 training in a calmer environment, then quickly and easily  
5 transition into a more challenging environment on the ocean  
6 side as personnel improve their skills and fitness levels.

7           Southern California's temperate climate also allows  
8 for year-round training. The SSTC is also centrally located  
9 within our nation's largest concentration of naval forces.  
10 Its close proximity to necessary infrastructure, logistics,  
11 personnel and other complimentary training ranges makes it a  
12 critical training range for a wide range of military  
13 commands.

14           This allows our servicemen and women stationed in  
15 the San Diego area to fulfill their daily training  
16 requirements without having to travel away from home. And  
17 that's a significant aspect of the Silver Strand Training  
18 Complex, is that people can do a large majority of their  
19 training in -- literally in the backyard of where they're  
20 stationed so they can maximize the amount of nights they get  
21 to sleep at home. They can go to Jimmy's soccer tournament.  
22 They can go to Sally's play. They can go to PTA meetings  
23 because they can do high-quality, realistic training right  
24 here, and they're home that night sleeping in their bed.

25           And you can imagine with the amount of time that

10

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1 protecting the environment is a priority for the Navy. The  
2 Navy is committed to complying with its legal  
3 responsibilities for protecting the physical and natural  
4 environment and has established a successful track record of  
5 environmental stewardship while meeting our mission.

6 To accomplish its environmental stewardship goals,  
7 the Navy implements protective measures on land and in water  
8 to reduce the potential effects from the terrestrial and  
9 marine environment while ensuring public safety and  
10 accessibility.

11 I will now turn the presentation to Ms. Delphine  
12 Lee from the United States Pacific Fleet, who will tell you  
13 about the Navy's proposed action and give you an overview of  
14 the draft EIS and the environmental analysis process.

15 MS. LEE: Can you guys hear me? Okay. Great.

16 Thank you, Captain Lindsey.

17 My name is Delphine Lee, and I'm the project  
18 manager -- I'm the project manager for the Silver Strand  
19 Training Complex environmental impact statement. I'm here  
20 tonight to give you an overview of the findings contained in  
21 the environmental -- the draft EIS.

22 The draft EIS was prepared by the Navy to comply  
23 with the National Environmental Policy Act or NEPA. It is an  
24 important part of the Navy's overall commitment to  
25 environmental stewardship as it trains. The Navy is the lead

12

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1 agency for this EIS. The National Marine Fishery Service is  
2 the cooperating agency on the EIS in addition to their role  
3 as a regulator.

4 The Navy proposes to improve the availability and  
5 quality of training opportunities at the Silver Strand  
6 Training Complex to achieve the required levels of  
7 operational readiness as mandated under federal law. To meet  
8 training requirements, the Navy proposes to, one, continue  
9 current training; two, increase training frequency and types  
10 of training; three, conduct existing routine training  
11 activities at additional locations within established  
12 training areas. And I want to be clear that the Navy is not  
13 proposing to expand the training area, just where we train  
14 within the existing range.

15 Four, we're proposing to introduce new platform and  
16 equipment into training and, five, introduce access -- excuse  
17 me -- increase access and availability of existing beach and  
18 inland training areas.

19 The proposed action is needed to accommodate the  
20 future military readiness requirements, including increased  
21 usage of the Silver Strand Training Complex, year-round  
22 access to training areas and flexibility and realistic  
23 training.

24 Three alternatives were evaluated in the draft EIS  
25 to help determine the appropriate level and type of training

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1 activities required for the Navy to meet its needs. Under  
2 the no action alternative, the Navy would continue to conduct  
3 training as it has historically at the Silver Strand Training  
4 Complex. Training would not be different from what you've  
5 seen over the last five to ten years. This alternative  
6 provides a baseline for assessing the potential environmental  
7 impacts of other alternatives.

8 Alternative 1 is designed to meet the Navy and  
9 Department of Defense's current and near-term training  
10 requirements and is the Navy's preferred alternative.  
11 Specifically, Alternative 1 proposes to, one, increase the  
12 frequency of training from about 4,000 activities to over  
13 5,000 activities annually; two, it proposes to introduce new  
14 types of mine countermeasure, amphibious and special warfare  
15 training activities.

16 Three, we're proposing to conduct existing routine  
17 training at additional locations within the Silver Strand  
18 Training Complex to improve the diversity of training. Four,  
19 we're proposing to introduce new platforms and equipment into  
20 training, specifically the MH-60S helicopter. We're going to  
21 replace the amphibious assault track vehicle with an  
22 expeditionary assault vehicle and upgrade the existing  
23 ship-to-shore fluid transfer system.

24 And lastly, Alternative 1 proposes to conditionally  
25 increase the availability of beach and inland training areas

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1 to accommodate this proposed increase in training activities.  
2 Alternative 1 is the Navy's preferred alternative because it  
3 would fully support the types of training -- type and  
4 frequency of activities required to achieve complete fleet  
5 readiness and allow the Navy to carry out its mission at the  
6 Silver Strand Training Complex.

7 Alternative 2 is also designed to meet current and  
8 near-term training requirements. This alternative includes  
9 proposals identified under Alternative 1. Unlike  
10 Alternative 1, however, it would also allow for year-round  
11 access to all 7,000 yards of ocean-side beaches along the  
12 Silver Strand Training Complex, north and south, for  
13 continuous year-round training. California Least Tern  
14 nesting habitat at delta north and south would continue to be  
15 preserved.

16 In preparing the draft Environmental Impact  
17 Statement, the Navy evaluated potential effects of the  
18 alternatives on the marine, natural and human environment.  
19 The Navy took a comprehensive approach in assessing the  
20 potential effects on 16 different physical, biological and  
21 socioeconomic resource areas. We will present some of these  
22 findings here.

23 We encourage you, if you haven't already, to review  
24 the draft EIS, which presents the findings of the Navy's  
25 environmental analysis for each of these resource areas. We

15

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1 welcome your comments on the findings or the methods of  
2 analysis.

3 For the most part, the resources analyzed in the  
4 draft EIS, we found no significant impacts or long-term  
5 effects from the Navy's proposed action. Training at the  
6 Silver Strand Training Complex creates intermittent  
7 short-term noise from various sources such as aircraft,  
8 vessels and vehicles. Although these training activities  
9 could be audible, they would not contribute substantially to  
10 the overall average sound levels of the area. Increased  
11 training activities would increase the tempo of intermittent  
12 short-term noise.

13 The Navy has established protective measures to  
14 reduce the effects of noise on the surrounding community. It  
15 works to minimize noise by considering the location and time  
16 of day of training activities.

17 The use of training materials may deposit small  
18 amounts of material on land and underwater training areas.  
19 Deposited materials are collected wherever feasible. The  
20 trace amounts left are not expected to affect biological or  
21 physical resources.

22 Many sensitive species including endangered and  
23 threatened species are found on or near the Silver Strand  
24 Training Complex. For many years, the Navy has taken  
25 proactive steps to protect the natural resources on its land.

16

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1 Threatened and endangered birds on the Silver Strand Training  
2 Complex include the California Least Tern, the western snowy  
3 plover and the light-footed clapper rail. Training  
4 activities have the potential to impact the Least Tern and  
5 the snowy plover, both of which nest on training beaches.

6 Since the mid-1980s, the Navy has implemented a  
7 comprehensive and adaptive natural resource management  
8 program and spends over half a million dollars annually to  
9 maintain protection for these species. Thanks to this  
10 program, we've seen a dramatic increase in the Least Tern and  
11 western snowy plover nesting on the Silver Strand beaches.

12 The nesting continues to expand even with the Navy  
13 training on the same beaches. No significant impacts on sea  
14 turtles or marine mammals are expected from the proposed  
15 action. Various measures will help to protect these species  
16 during training. For instance, the Navy will monitor for  
17 these species and hold training as needed to protect them  
18 from harm. Effects on other marine biological resources and  
19 terrestrial biological resources will be minimal, as they are  
20 temporary and/or localized.

21 Commercial fishing, sports fishing, diving, boating  
22 and other ocean recreational activities occur regularly  
23 within or near the Silver Strand Training Complex. The Navy  
24 understands the concerns the community may have regarding  
25 public access. Training activities would continue to be

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1 conducted in long-established military training activities --  
2 excuse me -- training areas. The training areas would not be  
3 expanded.

4 The public would continue to have access to the  
5 beach and water areas adjacent to active training. During  
6 some training activities, public access to the training site  
7 may be limited for public safety and security reasons.

8 Significant impacts to cultural resources,  
9 transportation circulation and socioeconomics are not  
10 anticipated from the Navy's proposed action. The Navy must  
11 comply with numerous federal environmental laws, regulations  
12 and executive orders such as those that are listed here. To  
13 help ensure compliance with these environmental requirements,  
14 the Navy has worked with and will continue to work closely  
15 with a number of regulatory agencies, including the U.S. Fish  
16 and Wildlife Service, the California Coastal Commission and  
17 the Regional Water Quality Control Board.

18 At this time, the Navy has completed the first  
19 three steps in the NEPA process, and we are now in the phase  
20 of providing the draft EIS for public review. Let me review  
21 the progress so far. The EIS was initiated on August 6th,  
22 2001, and the Navy held two public scoping meetings to invite  
23 the public to provide input on the proposed action, the  
24 alternatives under consideration and the environmental  
25 resources and issues to be analyzed.

18

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1 Government agencies, organizations and the public  
2 were encouraged to submit comments throughout the public  
3 comment period. The comments received were considered in the  
4 preparation of the draft EIS that we have here tonight. We  
5 are now at the 45-day public document review period and at  
6 the public hearing. This phase is an essential part of the  
7 NEPA process because it allows the public to review the  
8 document and comment on the Navy's analysis and potential of  
9 environmental effects.

10 We encourage you to provide your input today or by  
11 March 9th so that it can be considered for incorporation in  
12 the development of the final EIS. All comments will be  
13 considered. The Navy is committed to keeping the community  
14 informed throughout the development of this EIS. These  
15 public hearings are just one opportunity to share information  
16 and, more importantly, to encourage your feedback and  
17 comments.

18 I will now turn the presentation back over to Lewis  
19 to describe how to obtain more information and how to comment  
20 on the draft EIS.

21 MR. MICHAELSON: Will you bring the lights back on?  
22 I had someone assigned to bring them down. I don't know  
23 where he went to bring them back up. Breanna, do you mind?  
24 No. She's got to go to the master. My light-turner left the  
25 room. Okay. Good. Thank you.

19

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1           In addition to holding these public hearings, the  
2 Navy has established a website to make it easy for you to  
3 find and comment on the environmental documents. The draft  
4 EIS, for example, is posted on the website. It also has  
5 additional background information and links to the fact  
6 sheets and posters that are available here tonight.

7           You may also review a hard copy, if you would like,  
8 of the draft EIS by visiting either the Coronado or Imperial  
9 Beach library. The addresses of these libraries are provided  
10 on the NEPA process handout you received tonight when you  
11 came in.

12           Thanks.

13           The Navy does, in fact, welcome your review and  
14 input on the analysis. I hope they've made that very clear  
15 to you both here and at the poster stations earlier this  
16 evening. And there are several ways for you to submit  
17 comments. Obviously, we're going to be accepting oral  
18 comments here shortly tonight after this presentation.

19           Written comments may also be submitted by filling  
20 out the comment form that you were handed when you came in.  
21 We have the table over there. You can also use the  
22 touchscreen to type them in if you would like to. There is  
23 also the -- as I pointed out, Kent Randall, the point of  
24 contact, this is the address. It's also on all the handouts.  
25 You don't have to copy it here.

20

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1           So you can submit them in writing and mail them in  
2 using a postal -- you know, there's postal mail, or you can  
3 log onto the website and leave your comments electronically.  
4 Just keep in mind that March 9th is the deadline for  
5 postmarking or receiving those comments.

6           We'll now begin the oral comment session portion of  
7 the public hearing. If there is anyone who wishes to speak,  
8 we would ask you to fill out one of these cards. This is how  
9 we keep track of who is going to be speaking and what order  
10 they're going to do that. Is there anyone who hasn't yet  
11 signed up who would like to speak?

12           Actually, if you could just go pick those up for  
13 her, and hold up your hand if you would like to fill one of  
14 these out. Thank you. I want to make sure everyone who  
15 wants to speak gets an opportunity to do that. Thank you,  
16 Corey.

17           To ensure that we get an accurate -- here's some  
18 more pens if you would like.

19           To ensure that we get an accurate record of what  
20 you have to say, please help me, if you're going to speak  
21 tonight, by respecting the following ground rules: First,  
22 please speak clearly and slowly into the microphone over at  
23 the lectern there. We have a court reporter here, as I  
24 pointed out. She's going to be making a verbatim transcript,  
25 and we want to make sure we get an accurate record of what

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1 you have to say.

2 All we need is your name and any organization you  
3 represent. We don't need addresses. Second, each person  
4 will have three minutes to speak. Third, if you have a  
5 prepared written statement -- and you may turn it in at the  
6 registration table or you may read it out loud if you can do  
7 so within the three-minute time limit. Fourth, please honor  
8 any requests that I make for you to stop speaking when you've  
9 reached the three-minute time limit.

10 In order to make it easy for you to know when that  
11 is going to occur, I have this sign. It says "30 seconds."  
12 That means you have 30 seconds left of your three minutes.  
13 And if you manage to make it to the end of three minutes,  
14 I'll hold up this one. It says "end." And that way, you can  
15 wrap up your comments comfortably at the end of the three  
16 minutes.

17 With that -- let's see. I did want to mention that  
18 we are trying out some new technologies to involve people in  
19 the EIS. Some of you people may have used that touchscreen  
20 for either getting information or for leaving your comments.

21 We are also videotaping, trying to experiment with  
22 the ability to make copies of that and put that on the  
23 website as well so that people can see what happened at the  
24 hearing. So I just wanted you to be aware that we were doing  
25 that.

1 So with that in mind, let me go ahead and read the  
2 speaker comment cards I have already to have some idea of  
3 where you're coming up in the rotation so you can be ready to  
4 come up to the microphone. The first speakers will be Bill  
5 Adams, followed by Jennifer Blair, Beverly Dyer, Normandie  
6 Trovato-Wilson, Gary Trump and Marilyn Field. So, again, if  
7 you would kick us off, Bill Adams. Thank you.

8  
9 PUBLIC COMMENTS

10 \* \* \* \* \*

11 MR. ADAMS: Yeah, my name is, of course, Bill  
12 Adams, and I'm primarily interested in -- I'm a shore  
13 fisherman. I've been shore fishing Coronado beaches since  
14 1949. As a matter of fact, when I was ten years old -- my  
15 dad was in the Marine Corps -- I was fishing off the Coronado  
16 jetty in front of the hotel in 1943 at age ten. So I know a  
17 little bit about shore fishing.

18 Now I'm particularly interested in your  
19 Section 3.8, quote, fish. And I'm going to be talking mostly  
20 about what we shore fisherman use as bait. Those are called,  
21 especially in the summertime, sand crabs. That's the  
22 backbone of shore fishing in this area here. On your section  
23 references, you talk about -- you have 75 references on 15 --  
24 15 pages, I think it is.

25 I wrote reports for the Navy for over 30 years. So

1 I was a little surprised when I opened up this document -- a  
2 young man earlier explained to me why you're not doing it,  
3 but usually when you have a reference, you would have -- if I  
4 went to the reference section, it would say in the report  
5 what page this came from, or pages. All right. That's not  
6 done.

7 It's almost impossible to go through that report  
8 and find out where you're talking about. For example, you've  
9 got one report dated 1892, some author who wrote something in  
10 1892. I'd like to know what was so important that was  
11 required to be in the reference -- 75 references.

12 The other thing that many of us shore fishermen are  
13 concerned about, and both the lifeguards in Coronado are well  
14 aware of the situation, especially shore fishermen, and that  
15 is wheeled vehicles on the beaches. Okay? Now, years ago,  
16 when I was on the city council in Coronado, we managed to  
17 talk the Navy into getting off the wet part of the sand.  
18 That's where the sand crabs are at.

19 But I noticed just recently they're still driving  
20 those vehicles on the wet sand, especially at low tide.  
21 That's almost a no-no. You're killing the sand crabs.

22 Now, you say there's no long-term effect. Well, I  
23 can tell you, as a fisherman, there is. There are no sand  
24 crabs on Coronado beach right now. If I go down to Silver  
25 Strand, there are sand crabs. If I go down to Imperial Beach

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1 by the pier, there are sand crabs.

2 Oh, my God. I guess I'm going to be cut off real  
3 short here. Amazing. I don't see how you can have a real  
4 impact on a discussion when you only have three minutes. I  
5 mean, that's ridiculous. And then tell us, "Oh, by the way,  
6 we've got a thick document here," and you want us to respond  
7 by March 9th. That is ridiculous, too. And there's only one  
8 copy of that report in the Coronado library.

9 Yeah. Well, I've said my piece.

10 MR. MICHAELSON: Next speaker is Jennifer Blair.

11 Actually, the court reporter needs to be able to  
12 make an adjustment, if you don't mind. Ready?

13 Okay. Go ahead. Thank you. Just state your name.

14 MS. BLAIR: Jennifer Blair.

15 My question -- I noticed in the agencies that the  
16 California Environmental Quality Act really was not addressed  
17 in there, and my specific question is related to noise, and  
18 the helicopter noise is the main problem that I'm seeing. I  
19 live in the Cays, and I understand we're not talking about  
20 the helicopters that are going from -- transporting from  
21 Miramar and down to the south end in IB, but you're  
22 considering -- I forgot how many sorties that you want to  
23 have in addition of the helicopters, and how is that  
24 addressing the environmental noise act? That's just a  
25 question I have.

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1 MR. MICHAELSON: Okay. Thank you.  
2 The next speaker is Beverly Dyer. Brandon, can you  
3 do me a favor and bring the microphone up a little bit?  
4 Thank you.

5 MS. DYER: I think it's ludicrous that the Navy has  
6 suddenly thrown this upon our public.

7 MR. MICHAELSON: Would you state your name, please.

8 MS. DYER: I want to know how long they have been  
9 studying this, why we haven't heard about it before. I know  
10 they've been saying they're going to get all this money, and  
11 they can do all these things, but did they ever tell any of  
12 us that they were going down the strand? None. I have never  
13 seen it released until last night, and I didn't have time to  
14 write up all of my questions that I have, all the comments  
15 that I have.

16 But I have been jotting down different things as  
17 you've gone along. But it just doesn't seem right that  
18 suddenly we know -- we read about it in the paper, and a lot  
19 of people didn't see it in the paper, and there has been  
20 very, very little about it on the television. Now that isn't  
21 fair. It isn't fair for the Navy to suddenly come in to say  
22 "We're doing all these things, and we've done all these  
23 things and we've looked up all the environmental necessities  
24 and for the project."

25 But why haven't we known? Why haven't they told us

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1 if we live here? I live in the Cays. I've lived there  
2 40 years, and I've watched things. I haven't seen any kind  
3 of action in that area. In fact, at one time they were going  
4 to build a golf course up where you now have buildings on the  
5 hill. We used to walk there. There wasn't anything going on  
6 there. So -- and suddenly, you've done all these things.  
7 You're going to take it over, and there has been very little  
8 going on even north of the -- of Silver Strand park where  
9 people park right up -- up to the Navy property.

10 But I haven't seen actions going on that far down,  
11 and perhaps I missed a few, but I doubt it, because I drive  
12 there all the time. And that's another thing that you did  
13 not bring up, and that is traffic. The traffic has gotten  
14 absolutely horrible because of the Navy, because of North  
15 Island. They've been working on that tunnel for North  
16 Island, and that's ridiculous because we have -- already have  
17 all this traffic coming up from the -- the helicopter base  
18 down in Imperial Beach, coming up the strand. They're just  
19 continual already.

20 Now you want to do all these other things. You  
21 want to save the Navy from having to go far away from their  
22 homes. Well, what about the people that live here, that  
23 have -- live in Imperial Beach or live in the Cays or live in  
24 Coronado? You just add that much more to the people that are  
25 here. Even though you keep your people from driving, there

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1 are other people that live here, too, and the people that  
2 work for the Navy.

3 Thank you. I'm going to also include a letter,  
4 so -- later on. Also -- and I agree with the noise and the  
5 pollution, you have -- nothing has been said about the  
6 pollution in the air that we breathe from the planes going  
7 over anything that's on the beach that we get from any of  
8 their -- their vehicles and any of the pollution that's in  
9 the water. They have the Silver Strand beach there where  
10 public comes in and uses up all summer, even in the  
11 wintertime, and they use that beach as do the surfers. Thank  
12 you.

13 MR. MICHAELSON: Thank you. That was Beverly Dyer  
14 who just finished speaking.

15 Normandie Trovato-Wilson, please.

16 MS. TROVATO-WILSON: Hi. I'm Normandie  
17 Trovato-Wilson, and I'm with the San Diego Audubon. I want  
18 to thank Captain Lindsey and Delphine and Lewis for hosting  
19 again tonight. I have just a few things that didn't come up  
20 last night.

21 The first thing was we know that there is  
22 anticipated projection in -- an increase in levels of  
23 recruitment, and we completely understand that with the level  
24 of new recruits that are needed to maintain the fleet  
25 readiness. However, if levels drop in the future, we would

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1 be interested in including a provision that indicates if for  
2 some reason there is complete peace everywhere on earth, for  
3 instance, and training levels dropped dramatically, that  
4 certain training lanes which are not currently used, if they  
5 are used in this future Alternative 1, that they might be  
6 phased back.

7 It was brought up last night about peak noise  
8 events and how peak noise events might be a helpful statistic  
9 to include in the second draft of the EIS as opposed to  
10 average noise levels, because if we're talking about peak  
11 noise, we can have one really loud peak noise, and then the  
12 rest of the day could be quiet, and that would be an average  
13 noise level, but that wouldn't analyze the data of the peak  
14 noise and how loud it would be.

15 The other thing that I want to repeat from last  
16 night is that the California Least Tern is currently in limbo  
17 of being down-listed by the U.S. Fish and Wildlife Service,  
18 and that would have a big effect on what would be going on at  
19 the SSTC. And just as a side, recovery efforts are often  
20 unpredictable and hard to predict what's going on. And there  
21 is a commitment, clear commitment by the Navy to maintain the  
22 environmental integrity of the SSTC.

23 And it's my personal opinion, not necessarily  
24 Audubon's, that maybe some phasing in could be added into  
25 the -- the use -- the plans, so maybe trying something, if

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1 you see a negative impact, phasing it out. I don't know  
2 exactly what the protocol is for that.

3 And it is our hope, from Audubon, that these steps  
4 are not towards general reduced protection of wildlife in  
5 general, but maintaining of the Navy's commitment to the  
6 environmental integrity of the SSTC. Thank you.

7 MR. MICHAELSON: Thanks.

8 Our next speaker is Gary Trump.

9 MR. TRUMP: My name is Gary Trump. I live in the  
10 Cays. Ma'am, sirs, thank you for having us. I was a little  
11 late, so I'm not so sure what's been covered, but my major  
12 question would be: Are you going to have an independent  
13 study to corroborate what your positions are? Because I  
14 think without that, nobody's going to believe you, at least  
15 the skeptics won't.

16 The other thing is, we live at the very bottom of  
17 the Cays. There's a lot of unburnt fuel from the helicopter  
18 passages. There is a lot, and it's all over the patio  
19 furniture. It's not thick, but it's there. And if you  
20 increase your level of helicopter flights, you're going to  
21 increase that, too.

22 The other thing is we sit out on the patio quite a  
23 bit, and there are times, with your helicopter noise, that we  
24 have to stop talking. And I'm quite sure that you don't  
25 really want to have that happen in this environment. It's a

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1 lovely environment.

2 We came from Los Angeles, and we've never known you  
3 people before. We live in the Cays, and there are a lot of  
4 people in the Navy there. We love you very much. We're  
5 worried about you, and yet I think there are some things  
6 about your proposition which probably is not -- I don't think  
7 withstand a peer review. So maybe you can think about that.  
8 Thank you so much.

9 MR. MICHAELSON: Thank you. I'm going to read  
10 ahead the next speakers so you can know where you're coming  
11 up. Marilyn Field -- and if I mispronounce names, I  
12 apologize in advance -- I believe this is Steve Cohan,  
13 followed by Ryan Short and Judy Haims.

14 MS. HAIMS: Good evening. I'm Marilyn Field. I'm  
15 a Coronado resident, and I'm very concerned about this  
16 project. I'm very concerned about the noise impacts and the  
17 pollution impacts. The newspaper said there was going to be  
18 live fire. I was told tonight there wasn't, but I think it  
19 would be good if we understood exactly what was going on.

20 As far as the noise impact, it simply defies  
21 credibility that there's going to be no significant increase  
22 in noise. It may -- you can do all kinds of things with  
23 statistics. You can average it out over a long period, and  
24 somebody said you could play all kinds of games with it, but  
25 it's simply not credible that this is not going to add to

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1 noise in Coronado.

2 This is a small residential community, and you just  
3 cannot keep using this as though this is your only training  
4 facility. You have other places where people can train.  
5 And, yes, it's more convenient here, but you have to balance  
6 that against the needs of the small community, and you are  
7 very definitely going to be impacting the quality of life  
8 here.

9 Already, we have serious impacts of helicopter  
10 noise. We live on the other side. We live on the San Diego  
11 Bay side, and yet we are constantly, in the summers  
12 particularly, affected by helicopter noise so that we can't  
13 watch the evening news. We can't have telephone  
14 conversations. We can't conduct conversations around the  
15 dinner table because the helicopters will come in fleets  
16 going south or north on the bay. And they're supposed to  
17 stay offshore, but they don't.

18 Now, I'm told that this project did not analyze the  
19 helicopters going to and from the training areas. Now that  
20 seems to me it's probably a violation of NEPA. Under the  
21 National Environmental Policy Act, you're supposed to  
22 consider all of the environmental impacts, whether they're  
23 remote or anything that's affected by this project.

24 You said you've been working on this since 2001,  
25 and yet you've chosen to analyze the helicopter traffic

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1 patterns and noise to and from the training area separately.  
2 Now that's called segmentation. It's illegal under NEPA.  
3 You're supposed to analyze the whole thing, and the public is  
4 supposed to have an opportunity to understand and comment on  
5 the total effects of the project, not chopped up into little  
6 pieces so that it looks benign, but the entire impact of the  
7 project. That needs to be done before you proceed here.

8 Secondly, I think the gentleman who just spoke made  
9 an excellent idea. I think we do need some independent  
10 analysis of your conclusions, because they're simply not  
11 credible. And I think it's important to consider the quality  
12 of life here and the human element, as well as the wildlife.

13 So I'd like you to think about what you're doing to  
14 Coronado. It's not just about the Navy. This is a small  
15 community, and we really need to be very aware that you  
16 cannot simply continue to load Navy operations here without  
17 ruining this small town. Thank you.

18 MR. MICHAELSON: The next speaker is Steve Cohan.

19 MR. COHAN: My name is Steve Cohan. I just wanted  
20 to make sort of a summary statement about my impression of  
21 the project. People have talked and brought up some very  
22 good points. The impression is that there's going to be a  
23 really significant change of impact on the beach. The fact  
24 that this process was started in 2001, that now you're -- it  
25 was ten years ago and you're now having public hearings, I

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1 think that the presentation has tended to minimize what the  
2 likelihood is of the impact, that it's going to be  
3 significant.

4 The people have mentioned these really important  
5 areas that really haven't been fully addressed, the impact on  
6 wildlife, the noise impact, the possibility of future  
7 cutbacks of these operations, legal compliance with  
8 preparation of the report.

9 All of these things can't be dealt with, of course,  
10 in three minutes, and I'm not prepared to make any technical  
11 statement about it, but I think you should take into  
12 consideration that the impression of the community is -- is  
13 that this is going to be a significant degradation of what is  
14 a very beautiful beach, very unusual beach condition in  
15 Southern California.

16 There aren't many white-sand beaches that are left  
17 that are in the quality condition that it's in. I would just  
18 make one further statement that this isn't entirely a problem  
19 that I would attribute to the Navy. Having lived around the  
20 Navy and watched its operations, including the helicopter  
21 operations, the Navy's done a good job, I think, of trying to  
22 concern itself with public impact. This isn't entirely the  
23 Navy's doing.

24 It has to do, perhaps, with what really is a  
25 long-term problem of our poor political leadership out of

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1 Washington. Nevertheless, it looks like a very significant  
2 degradation of the community. Thank you.

3 MR. MICHAELSON: The next speaker is Ron Short.

4 MR. SHORT: Hi. My name is Ron Short, and I live  
5 in Imperial Beach about a block south of Camp Surf, which is  
6 the southern border of your training complex. My concerns  
7 are basically the -- sort of like the infringement on our  
8 quality of life down there. One is noise. You know, my wife  
9 and I were awakened in the middle of the night by live  
10 machine gunfire, and I suspect this sort of activity will  
11 continue to go on.

12 I would appreciate a heads-up if that's going to be  
13 the case. At least we know what to expect. I know when they  
14 filmed Transformers II at that complex, they gave everybody  
15 in the community some heads-up, so we knew the pyrotechnics  
16 and stuff like that was coming.

17 Another concern is the -- perhaps the increase in  
18 traffic on Silver Strand Boulevard going to the gate there at  
19 the southern end of the complex. You know, I would be -- I  
20 would like to know if you anticipate an increase in traffic,  
21 because that would also impact the quality of life down  
22 there. Thank you.

23 MR. MICHAELSON: The next speaker is Judy Haims.

24 MS. HAIMS: My name is Judy Haims, and I live at  
25 the Cays. I agree with the noise. That is a tremendous

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1 issue. You have no idea how much noise is generated down  
2 there. I've been there for 18 years. You -- the paper says  
3 that you have like 150 -- 150 sessions, and they're going to  
4 go up to 700-and-something. That's not a small increase.

5 And they talk about the decibel level. It's  
6 ingenuous to say the decibel level may stay the same. It may  
7 stay the same, but the amount and time and duration for the  
8 extra 550 sorties that you're going to have is tremendous,  
9 and that needs to be addressed.

10 And also, the strand -- the Silver Strand is used  
11 tremendously all year long by campers. It's going to affect  
12 these people who don't have the opportunity that we do to  
13 live in Coronado. And this has just been too fast and too  
14 soon. You may have known about it, but the people who live  
15 here and enjoy this way of life are not aware or have not  
16 been until now.

17 MR. MICHAELSON: That exhausts the list of speaker  
18 cards that I have. However, as is often the case, something  
19 that someone else has already said may have inspired you to  
20 want to also offer comments. Is there anyone else here in  
21 the audience who would like to?

22 Go ahead and just come up to the microphone, and  
23 we'll get you to fill out a card afterwards. And use your  
24 name for now.

25 MS. DAVIS: I'm Shannon Davis. I live in Imperial

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1 Beach. One issue that has not been addressed on the south  
2 end of the project at Radio Receiving Facility is ambient  
3 lighting. I have driven down the strand in the middle of the  
4 night and seen lights on that were way too bright, and I have  
5 concern for the endangered species there and how that ambient  
6 lighting would affect the birds.

7 And I'm also very concerned about the fact that you  
8 mentioned that you may want to take 200 men in a year's time  
9 of foot traffic through the vernal pools when they're dry.  
10 And you must understand that that is a very delicate ecotone.  
11 Some of it -- some of the vernal pools took thousands of  
12 years to come into the making, and there are sediments there  
13 that can be irrevocably destroyed.

14 The eggs, though they are dormant and dry, come  
15 alive when the rain season comes. But they can be there for  
16 years without any activity there. And I'm concerned as to  
17 why you wouldn't fence those vernal pools and keep them in  
18 and the foot traffic out of there. So that's very much a  
19 concern.

20 Also, I would have liked to have seen some studies  
21 included from U.S. Fish and Wildlife and from your biologist  
22 on the populations of the San Diego fairy shrimp. I would  
23 like to see if there are any other species in the vernal  
24 pools, if there is any possible genetic corruption from  
25 another species there.

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1           There was a study done by a Dr. Marie Sinedich  
2     S-i-n-e-d-i-c-h. She got her doctorate. In 2004, she did a  
3     study in all the vernal pools here in San Diego County, and  
4     she did it in cooperation with U.S. Fish and Wildlife, and  
5     the vernal pools at the Radio Receiving Facility were not  
6     included. And I -- my question is: Did the Navy not  
7     cooperate in those studies, and why wasn't that included in  
8     that inventory and in that study?

9           And also, I would like to alert you to the fact  
10    that there is a steady decline in the endangered fairy shrimp  
11    and that they could go extinct if you have foot traffic in  
12    there. You could do irrevocable damage.

13           MR. MICHAELSON: Thank you.

14           Corey, if we could get her a card to fill out, I  
15    would appreciate that.

16           Is there anyone else who has not yet had the chance  
17    to speak this evening? Yes. Go ahead.

18           MS. LAMBERT: Good evening. I'm Vicki Lambert, and  
19    I'm a resident here in Coronado. We've talked a little bit  
20    about traffic mainly on the strand, but I live here in the  
21    village. And I can only see -- or foresee that traffic  
22    across the bridge and down Orange on 75 is going to increase  
23    with the number of people that are going to come from their  
24    homes in the San Diego area to do their training here. And I  
25    don't know if that has actually been -- that level of

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1     increase has been taken into account in the city planning.

2           And with the tunnel discussions that we've been  
3     having, we need to also look at how we would deal with that  
4     increase along with our new carriers coming in. So thank  
5     you.

6           MR. MICHAELSON: Thank you. See, there were more  
7     of you that wanted to say something. Anyone else who would  
8     like to add their thoughts to this?

9           Can I just make sure everyone's had a first chance  
10    first? Anyone else? We did last night run by the same  
11    rules, and we did provide the opportunity for what I like to  
12    refer to as "second helpings," so if you would like to do  
13    that, please do. All I need is your name again.

14           MS. HAIMS: My name is Judy Haims.

15           Let me ask you this: What other sites could you  
16    use, and have you thought of other sites to use? Has there  
17    been a choice, or you just haven't told us that there was  
18    choices? And the thing that comes to my mind is what about  
19    using Camp Pendleton or renting the area from Pendleton or  
20    doing some kind of a swap or something, because you're going  
21    to have your beaches, you're going to have your landings, and  
22    you don't have the city with the quality of Coronado right in  
23    the middle of Pendleton.

24           MR. MICHAELSON: Just to be clear, we don't answer  
25    questions, so we'll take that as a comment. It will be

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1 looked at in the final EIS.  
2 MS. HAIMS: Okay.  
3 MR. MICHAELSON: Okay. Thank you.  
4 Anyone else who didn't have a chance to speak?  
5 Because if not, we are here until 7:30 and -- just as we did  
6 last night. We adjourned, and we had our poster staff go  
7 back and continue to provide information and answer  
8 questions. So if there is no one else who would like to  
9 speak, we are adjourned, and we'll be here until 7:30.

10 Thank you.  
11 (Hearing adjourned at 6:57 p.m.)

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Appendix F  
Response to Comments



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## F RESPONSE TO COMMENTS

The Navy received public comments on the Silver Strand Training Complex (SSTC) Draft Environmental Impact Statement (EIS) via four sources: written comments, information station comments, website comments, and oral comments. Regardless of the source, all comments have been treated equally. The comments were submitted during the public comment period (January 22, 2010 through March 9, 2010) and during the public comment period extension for the document (March 9, 2010 through March 30, 2010).

Comments were received primarily through the mail, website, or at the public hearings. Written comments were submitted to the Navy via the mail. Website comments were submitted to the Navy via the project website. Oral comments were taken directly from the official transcripts prepared by a court reporter. The comments have been reproduced as accurately as possible. In some cases, the editors may have made minor errors in the translation of some handwritten letters. For this reason, a copy of each comment has been placed in Appendix E. Private individuals are presented first, and are sorted alphabetically. Comments submitted by organizations are then presented, also in alphabetic order. Appendix E also contains the official transcripts of the oral comments made at the public hearings.

In preparing the Draft EIS each resource section was prepared and reviewed by numerous qualified individuals, to ensure that the proposed activities and issues received a rigorous and thorough assessment. The best available scientific data and the latest peer-reviewed studies were considered.

In this Final EIS, the Navy has made changes to the Draft EIS, based on comments received during the public comment period. These changes included factual corrections, additions to existing information, and improvements or modifications to the analyses in the Draft EIS. This section presents the public comments received and the Navy's responses to these comments. The public should note that these changes are non-substantive and do not result in any substantial modifications to the proposed action, the alternatives considered, the affected environment, or the environmental effects analyses of the Draft EIS.

Although all comments have been read and considered, some comments were not specific regarding the analyses or the alternatives in the Draft EIS and, therefore, could not be given specific responses and are not reproduced in this Appendix. As stated in the Council on Environmental Quality's (CEQ) Regulations for Implementing the National Environmental Policy Act (NEPA), 40 CFR Part 1503.3(a), "Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both."

To allow side-by-side review of the comments and the Navy responses, all comments have been transcribed and entered into a table format that follows in this Appendix, with the comment in one column and the Navy's response in the next column. Comments are presented in the same order in Appendix E as they are in this Appendix.

#	Name or Organization	Comment	Response
<b>F.1 COMMENTS FROM PRIVATE INDIVIDUALS</b>			
1.	William J. Adams	<p>This letter is in regard to the Silver Strand Training Complex draft EIS, dated January, 2010. The comments are in reference to Section 3.8 Fish, specifically in regards to SAND CRABS along the Silver Strand beach and Coronado beach.</p> <p>For those who do not know what sand crabs are, they are the primary food for fish, sharks, rays, birds and specifically Corbina (during the summer months). The Corbina is a primary fish that surf fisherman are after during the summer. However, during a GRUNION run, they are the primary food for large Corbina and Halibut. FACT: Over the last six or seven years the population of sand crabs has dropped to almost zero. Any surf fisherman can tell you that. Of course, there are lots of theories of what has caused this. Some people believe it is because of the raking of the sea weed off the beach, etc. But the Navy does not do this along their beach and still there are no sand crabs.</p> <p>The primary question that should be answered is why there are sand crabs at Imperial Beach, Mission Beach, Carlsbad and Huntington Beach. I believe that one of the major problems is the fuel emissions from the boats, etc., along the Silver Strand beach is the cause of the problem. What I am asking for is the following:</p> <p>(1) Delay for at least 60 days before this report is final so that other fishermen can comment on this draft.</p> <p>(2) The City of Coronado updates its water pollution equipment to measure the fuel emissions along Coronado beach.</p> <p>(3) Have an independent, scientific statistical study (at some level of confidence) to find out what happened to the sand crabs along Coronado beach. Maybe SDSU, SDU, or UCSD could perform this study with the funds being provided by the Federal Government.</p> <p>(4) Until this study is completed, stick with ALTERNATIVE I, NO ACTION ALTERNATIVE.</p>	<p>The Navy appreciates the public’s involvement in the NEPA process. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency response period for the FEIS was extended to March 30th.</p> <p>The City of San Diego Metropolitan Wastewater Department has monitored water quality offshore of Silver Strand since 1999 under the City's South Bay Ocean Outfall, located south of the Tijuana River estuary on the U.S-Mexico border. Ocean water quality monitoring by the City over the last three to five years provides a good understanding of typical water quality conditions in the area of potential effect. Local ocean water quality is generally good, with episodes of poor water quality associated with heavy storm runoff and sewage spills. As indicated in Section 3.5.2.3 of the FEIS, minor quantities of petroleum products, including fuel, oil, hydraulic fluids, and lubricants, may enter San Diego Bay and ocean waters during routine transits of Navy vessels and equipment conducting training activities. However, the small quantities of these substances released into the environment are not anticipated to affect water quality or marine invertebrates.</p> <p>The Pacific sand crab (<i>Emerita analoga</i>) is usually abundant, burrowed in the sand between tide marks on surf-swept beaches from Kodiak Island, Alaska to Bahia Magdalena, Mexico (Morris et al 1980). Pacific sand crabs are not currently listed as a sensitive species, and are extremely widespread, abundant, and seasonally variable. Factors such as regional oceanographic dynamics, variations in longshore transport, and local circulation patterns that determine sediment grain size and food supply (they are filter feeders) are what is likely regulating sand crab populations along SSTC beaches.</p>

#	Name or Organization	Comment	Response
2.	William J. Adams	<p>Thank you very much for extending the comments (to the Draft EIS) until late March. This letter expands on my comments to you dated March 5, 2010 on Section 3.8 Fish.</p> <p>Since then, some fishermen and others have asked me to add the following comments: (1) Sand crabs feed on tiny "plankton".</p> <p>(2) A female may produce thousands of eggs. She carries them until the eggs hatch. For two to four months, the "larvae" drift as "plankton". What I believe is that these and other types of "plankton" are being killed by fuel emissions from the boats, etc. Along the Silver Strand Training Complex, since the Navy has expanded the use of the beach over the last six to seven years, the water has become more polluted from the fuel emissions.</p> <p>What I am asking for is that until some studies are conducted to determine what has happened to the sand crabs, the Navy go with the "NO ACTION ALTERNATIVE".</p>	<p>The sand crab (<i>Emerita analoga</i>) has a long planktonic larval phase that implies a high dispersal potential, and coastal water transport is an important factor in determining its local and latitudinal distribution. An extended larval period allows individuals to colonize new areas with suitable habitats, and is a mechanism for annually restocking pre-existing populations (Tam et al., 1996). Factors such as regional oceanographic dynamics, variations in longshore transport, and local circulation patterns that determine sediment grain size and food supply (they are filter feeders) are what is likely regulating sand crab populations along SSTC beaches rather than fuel emissions, which was analyzed in Section 3.5.2.3 of the FEIS. The FEIS concluded that the minor amounts of fuel release during training activities would not affect the areas water quality.</p>
3.	Barbara Angioletti	<p>As a resident of Coronado for 15 years I have witnessed the increase of military training &amp; understand the importance of this to protect our country. I have read the proposal in re to the increase of training &amp; in my opinion the increase is tremendous!!! Yes, you need more training but you also have to consider the area that this is in. We want our children to have the best &amp; not hear the helicopters, etc. all day long. The military housing is in this area &amp; the families there will have to live with these noises. I do believe you have to increase the training but not to the extent that you are proposing.</p>	<p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts on the surrounding area. The Navy considered time and location of training so as to avoid disturbing the local community, and does its best to conduct noise-producing activities during the day. To train in real-world scenarios that may occur overseas, however, Navy personnel must train at various times of day, and in varying terrain and conditions.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p>

#	Name or Organization	Comment	Response
			As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water. The only nighttime helicopter overflights of residential areas are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.
4.	Virginia Aspe Armella and Eduardo Cortina	I am a resident of Coronado and I live in Coronado Shores, Cabrillo Building. I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. Suggested comments: I would appreciate your cooperation and efforts to maintain the quiet enjoyment atmosphere of the Coronado Shores, Cays, and Village as it currently exists.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. As indicated in Section 3.6 of the FEIS, noise effects of Navy training activities at SSTC are managed via administrative controls (planning). Activity planning considers location (e.g., Breacher training is located in inland areas) and time of day. Call-outs during physical conditioning training are minimized at night and when in residential areas. The Navy notifies local emergency personnel prior to training exercises that include the use of pyrotechnics or blanks. Cumulative effects of noise are presented in Section 4.3.6 of the FEIS.
5.	Andrew Bailey	Overall, after perusing the SSTC Draft EIS, I still want to be super-supportive of the Sailors and Marines (D of N) but have exceptions to some of the proposals and assumptions in the EIS. I realize that training these forces well will be good for the environment in the aspect that they will be able to wage war more efficiently. Still, we – they – are at war, and there will be "unavoidable adverse environmental effects." I was impressed and entertained by the EIS and support Alternative One but suggest more consideration in the following areas: <ul style="list-style-type: none"> <li>• Contingency plans for Alternative Two</li> <li>• Public notice about public access to beaches</li> <li>• Notice about nighttime activities</li> <li>• Mitigation measures in land use and detonations</li> </ul> Please, send a strong message by making contingency plans to implement Alternative Two. D of N should be ready to go a level higher to achieve objectives, and still have best practices. I also encourage beach activities "not limited to any day of the year" (3.1.2.2.2). [Did a lawyer write	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the adjacent neighborhoods of Imperial Beach and Coronado through contact with City

#	Name or Organization	Comment	Response
		<p>that?] At the same time, D of N could keep us civilian-beach-patrons informed about open beach hours. Perhaps the EIS Website can be converted into a beach-recreation information platform, with the option to call the NBC switch board. This would count as a land-use mitigation (3.1.1.7). If you're having a party, you invite your neighbors....</p> <p>Unfettered access to wet-sand areas on – say – four (4) daytime ultra-low tide events (-1.5' or more), and a couple daytime ultra-high tide events (6.5' or more) is fair quiet enjoyment. Concerted planning is already a protocol (5.15.3-4).</p> <p>Occasional access to Breakers Beach up to Zuniga Point seems fair too. The SP, duty assignments, and service members with restriction can keep civilians below the high-tide line. Perhaps D of N, in all its magnanimity, could share a drinking fountain, or a toilet. Look at the NAS Miramar Air Show.</p>	<p>offices or the Naval Base Coronado website.</p> <p>Public access to Breaker's Beach and Zuniga jetty is restricted for military security and public safety. Chapter 3.1, Land Use, presents information regarding land use, leased areas, and public access.</p> <p>Regarding 'contingency plans' for Alternative 2, all three alternatives discussed in Sections 2.2, 2.3, and 2.4 of the FEIS have been considered. One alternative (Alternative 1, Preferred Alternative) will be selected for implementation in the Record of Decision. In the unlikely event that some future situation necessitates changes to the selected alternative, the Navy will examine those needs and, if necessary, take appropriate actions under NEPA, which may include supplementing the Final EIS.</p>
6.	Andrew Bailey	<p>A staff member for this EIS, Alex, who like myself, enjoys beach running, did not know that we have access to most wet sand areas when there are no SSTC training activities. I carefully questioned another staff member about this (Bruce), but it seems contradicted by the EIS (3.1.2.2.2).</p> <p>I wish the beach entrance between SSTC-N &amp; Coronado Shores was better marked with a fair sign. I noticed that the SSTC-N lease extends only to the mean high tide line but shifts to "100 to 500 feet offshore." I can share the beach.</p> <p>Coronado residents should have advance notice about night operations so they can have the option to spend the night elsewhere.</p> <p>SSTC needs to have better communication with civilians and a website as a beach-recreation information platform could serve day-to-day needs.</p> <p>Overall, the lands leased by the Dof N spend more time unused, than with activities. Mitigation like restoring beaches after activities is expected and training protocols help, but the fact is that activities will increase 20% - other mitigations should be considered to offset this increase.</p> <p>I read that one mitigation measure is to manage predators. An extension would be to coerce other beach users to observe a higher level of stewardship. D of N with its unfathomable resources needs to outreach. SSTC spends most of its time as an absentee landowner.</p> <p>Bruce, an EIS staffer, explained that dog owners lose their dogs in the training areas. Dogs (and cats) area a terror to wildlife, wreak habitat, and leave damaging feces. Off-the-leash dogs are a problem city-wide and on the beach.</p> <p>One section mentioned "avoidance and minimization." I could see a special program with the Cays, educational signs, and volunteer enforcement. MAYBE Cesar Milan would lend a hand. Other mitigation was dismissed in this EIS "alternative" (5.9.3). Third-party observers are a cultural norm in the United States today: some people would kill Flipper for a tuna sandwich!</p>	<p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. New signs were placed at SSTC-S in March 2009 clarifying public access for pedestrians travelling on the beach. As described in Section 3.1.1.5.1 of the FEIS, the wet sand areas at SSTC-S are available for public use when training is not occurring below the mean high tide line. However, the wet sand areas at SSTC-N are not available for public use; they are leased by the State of California to the Navy for its exclusive use. The Navy plans to improve signage on both SSTC-N and SSTC-S to inform the public on how to help protect sensitive species.</p> <p>To further inform the public of training, the Navy has identified additional mitigation measures for alerting the adjacent communities about events which may be considered intrusive, and has posted signs and other controls on public access to the beaches. The Navy is coordinating with volunteer members of the public, the 'Plover Patrol', who are interested in helping manage public plover impacts. The public is not</p>

#	Name or Organization	Comment	Response
		<p>There's no excuse for not trying to manage it, especially considering the extremity of the action. I'd be pleased to say a little prayer for the fish: that they fatten the beachmaster. I can see Point Loma from my house, and my neighborhood's topography is in one of the charts. The Strand may be my home break.</p> <p>I could write more.</p>	<p>permitted to allow dogs off-leash in the training areas primarily because of the risk to native species.</p> <p>Regarding third party observers, the general public is restricted from participating in these training activities both for military security and for public safety.</p>
7.	Richard Barck	<p>I have listed below a number of points related to Navy anticipated use of SSTC-S which cause me concern:</p> <p>1) SSTC -S (see NRRF) - The Navy comments that SSTC has been established for over 60 years is disingenuous with regard to stating the local residential community around SSTC-S "should expect air and ground noise" in the proximity of the base. For residents building/purchasing homes in the SSTC-S/NRRF area, there was nothing more quiet than a radio receiving facility. SSTC-S was renamed from NRRF (Naval Radio Receiving Facility) during the period of the EIS study. The Federal Register of August 6, 2001 describes the Notice of Intent to Propose EIS (pp. 41009-41010) as including the NAB and the NRRF. In fact several references in the EIS still refer to NRRF, not SSTC-S (e.g., Fig. 3.11-4).</p> <p>Any training of amphibious landing and helicopter support has taken place only in the past few years. And it is NOT quiet - per the EIS, noise from both munitions and helicopters is projected to dramatically increase. This should NOT be done in a residential zone.</p>	<p>Navy operations at SSTC-S began in 1920 when the Navy Radio Compass Station was established at the site. The installation included ship-to-shore navigational antennas and radio receivers, and was used for advanced communications training up to 1999. Blanks, small arms, and pyrotechnics have been associated with NSW training on SSTC-N since the 1960s. The nature and intensity of training on beaches at SSTC-S by NSW and EOD have remained unchanged since 2001.</p>
8.	Richard Barck	<p>2) Helicopter, Aircraft &amp; Amphibious Noise - As residents local to SSTC-S we live in a particularly quiet area, especially during evenings and nights. There is relatively little traffic on CA-79 and many of us have doors/windows open to the sounds of breaking waves. Over the past couple of years we have been increasingly subject to LOUD helicopters/aircraft flying "close" to our homes. The sound prevents us from hearing evening TV -- or awakens us at night. When awakened, we often cannot immediately return to sleep. The noise could be greatly reduced by flying the helicopters/aircraft further offshore while on sorties north/south along the Silver Strand. We, as well as the residents of Navy housing, would appreciate that very much!</p>	<p>Helicopters support several SSTC training events. Under the No Action Alternative, up to 740 helicopters may be involved with SSTC training events. Approximately 100-150 helicopters per year fly into SSTC-S inland under the No Action Alternative. The remaining 590-640 helicopter operations occur offshore in the boat lanes or bay training areas.</p> <p>As proposed under Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations in the western portions of the boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove,</p>

#	Name or Organization	Comment	Response
			<p>and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard.</p>
9.	Richard Barck	3) SSTC-N - The portion of SSTC now called STTC-N (but formerly NAB) has been used for amphibious landing training for an extended period. Increased amphibious landings, helicopter activities and munitions training should be restricted to Boat Lanes 1- 10.	To train in real-world scenarios that may occur overseas, Navy personnel must train at various times of day, and in varying terrain and conditions. For example, the differences in training lane attributes at SSTC-S (nearshore in-water conditions such as the presence of sand bars or holes, beach conditions such as slope and depth of the beach, distance from other training activities occurring on SSTC-N oceanside beach and boat lanes) make them more suitable for meeting training needs than other available training lanes, and also fulfill the need for diversity in training locations
10.	Richard Barck	4) Snowy Plovers - Fish & Wildlife has formulated a significant effort in the last few years to increase Snowy Plover nesting/fledging in the SSTC -S area. Results for 2009 are in the table on the following page. Silver Strand S8 is the beach area with overnight facilities for RVs and heaviest beach use. Silver Strand NP contains staked-off area protecting nesting for the Snowy Plovers and Least Terns. The Navy should also be aware of the success in nesting and fledglings in the SSTC -S/NRRF.	The nesting and fledging success of snowy plovers at SSTC-S is accounted for in the Navy's analysis. The Navy has consulted with the USFWS, and has received a signed Biological Opinion (July 7, 2010) which concluded that, with mitigation measures in place, the Proposed Action would not jeopardize the continued existence of ESA-listed species. One condition of the Biological Opinion is that the Navy will coordinate with the USFWS in the development of the Long Term Habitat Enhancement Plan for SSTC and will submit the Plan to USFWS for review and approval. The Navy will allow USFWS 30 days to submit comments and an additional 30 days to approve the final study design and scope of work.
11.	Richard Barck	5) Vernal Pools and Fairy Shrimp - Vernal Pools are becoming few and far between, both as a result of drought and/or heavy pedestrian or vehicle use of the area(s) where they are found. There are very good protected Vernal Pool locations within SSTC -S/NRRF. Although the Navy	The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the

#	Name or Organization	Comment	Response
		has said that these area would be "protected" while wet, they would be used as trails and subject to traffic during "dry periods". Trails through Vernal Pools will effectively destroy them! They should continue to be protected.	maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. Thus, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Also, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection surveys in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.
12.	Richard Barck	6) Beach White 1/ Boat Lane 11- From the view in Fig. 1-3, the training area appears to encroach on the southern edge of Silver Strand State Beach, an especially significant area for nesting of Snowy Plovers.	The current locations of White and Purple lanes reflect the locations of these lanes as portrayed on NOAA Chart 18772. No Navy records have been found that indicate when the lanes were designated. It has been determined that these differences in the delineations are a result of an archival data error. The Navy is working with NOAA so that the location of these lanes can be corrected by submitting a request to NOAA with corrected latitudes and longitudes. Please note that no Navy training occurs on the State Beach.
13.	Richard Barck	7) Beach Access - Many morning walkers and joggers use the Silver Strand NP as their starting point for extended exercise. A significant number continue these workouts headed south to the Imperial Beach area - or vice versa. The access past NRRF has been through the sand area below the high tide line. The apparent closing of this area deprives the public of even more beach access in a beach-limited area.	Beach access at SSTC-S is not restricted below the high-tide line unless there is a Navy activity that needs to restrict access for either safety reasons or security concerns. Training activities, when they occur, may require public access restrictions to one or more beach lanes below the mean high tide line, depending on the nature of the training activity (hazards, security, etc.). If and when restricted access is required, safety personnel are stationed to keep nonparticipants from harm, and to ensure mission security.
14.	Richard Barck	8) Silver Strand State Scenic Highway and Scenic Highway Overlay Zone - What impacts will the increased activities have on CA-79 as a scenic highway in this area?	Training activities presented in this EIS are typically not within the sightline of CA-79, and are not expected to affect the view from this designated Scenic Highway
15.	Richard Barck	9) Silver Strand Elementary School- What effect will the escalated training have on our elementary school including noise and pollution affecting our students and teachers?	Noise effects on Silver Strand Elementary School are described in Sections 3.6.2.2.3, 3.6.2.2.4, and 3.6.2.3.7 of the FEIS. The FEIS notes that some existing and proposed training

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			activities may occasionally disrupt the classroom environment, consisting of interference with speech and hearing, and distraction for 20 additional days per year.
16.	Richard Barck	10) Surf Camp - The surf camp at the southwest end of the NRRF site serves ~10,000 kids/year. We would like this to continue and their access to the beaches to remain safe and free of pollutants.	The FEIS does not identify any adverse effects of the Proposed Action on the safety of Camp Surf residents. Other than noise, offsite effects of the training activities proposed at SSTC-S would be minimal.
17.	Edward Baumer	I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I hope that you can provide the level of quiet enjoyment that I have experienced for the last 8 years as I am a full time resident.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation plans for activities that may cause an impact to the environment or surrounding areas, and has presented these in the EIS. As indicated in Section 3.6 of the FEIS, noise effects of Navy training activities at SSTC are managed via administrative controls (planning). Activity planning considers location (e.g., Breacher training is located in inland areas) and time of day. Call-outs during physical conditioning training are minimized at night and when in residential areas. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities.
18.	Michael B. Baxter	I appreciate the opportunity to offer some further input and perspective on the proposed expansion of activities which will occur in the Imperial Beach area and Silver Strand training Complex As a matter of disclosure, I have received the letter sent to you by the City of Imperial beach dates March 5, 2010 and agree with their observations and requests. My comments herein should be considered in addition to theirs, and will be, I believe, concordant with them. I also have had the advantage of living on the oceanfront on South Seacoast Drive, north of Ream Field and south of Imperial Beach Boulevard for roughly the past 38 years. My comments are based on that period of observations. My first observation is that helps departing ream Field do not maintain the centerline of the runways, or projection of it, from the field or landing pads all the way out to sea for a distance of about 1 3/4 miles, which is i believe the prescribed route for a visual departure (VFR Rules of Departure). I have publically asked for a copy of these departure rules in public in the past and they have never been provided. I hereby ask for them again under the Freedom of Information Act.	The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.  As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime

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		<p>Instead of following the VFR departure rules, too many times the aircraft drift off their departure radial, towards the Pier. My observation, and that of others, is that once they are over the surfline too many times they begin their turn to the north and head for the pier. This turn should not be commenced until the seaward track is complete, about 1 3/4 miles.</p> <p>Many of observed Navy helos well inside the end of the pier. They then turn to sea again to "get around" the end of the pier before continuing north.</p> <p>All this could be avoided by simply following the VFR Departure rules, as I believe I've seen in the past.</p> <p>I would also ask that the VFR Departure pattern be amended so that departing helos continue to climb, perhaps to 450-500' as they depart Ream Field. This would reduce noise considerably.</p> <p>Let me address the night hours of operation next. I agree with the City's position (#46) that "there should be no helicopter training at Ream Field after 9:30 pm."</p> <p>I understand that from time to time a helo goes off course in its VFR departure from Ream Field. But I believe that far too much of this occurs and the community and residents are unable to effectively document this for the Navy with the present complaint system.</p> <p>It is a system which has failed you and costs the Navy in public support and goodwill.</p> <p>With the proposed increase in flight operations out of ream Field, I recommend the following:</p> <ol style="list-style-type: none"> <li>1. Place the officer who takes citizen complaints related to Ream Field helos in the Ream Field tower, or a location very close by so he can easily determine the probable sidenumber of aircraft over the beach. require that the aircraft commander 'report' the completion of his seaward track when he is 1 3/4 miles out, back to the tower or Duty Officer. remember that a citizen cannot see the sidenumber against the setting sun, twilight, or night-time conditions. this step would naturally improve a complaint system which most of us rate as nonresponsive and a failure.</li> <li>2. require that the citizen complaint officer stay at his post during his watch period. I would presume that there are four hour watches when flight operations are underway. He can bring a bag lunch, or a box lunch can be provided for him. The main point is that he/she is there to receive citizen complaints as they are occurring, not sometime later. from some very distant spot.</li> <li>3. He should provide some sort of file number to the caller for future reference or follow up.</li> <li>4. the results should be reported to the community, perhaps quarterly, to inform the policy-makers and the citizens.</li> </ol> <p>I wish to acknowledge that many departures out of Ream Field are correctly done now, day and night both. And further, we appreciate everything which the military does to protect and defend this nation. By the same token, we should be willing to receive and take to heart constructive criticism when it is warranted and offer my observations and comments in that spirit.</p>	<p>helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the FEIS. The Navy acknowledges the FOIA request, and is processing the request in accordance with the FOIA. The Naval Base Coronado Public Affairs Officer can be contacted for noise complaints and operational suggestions.</p> <p>Your comment addresses an issue that is outside the scope of this EIS. The NBC Commanding Officer has established air operations course rules for Naval Air Station North Island and the Naval Outlying Landing Field (NOLF, note formally known as NOLF Field) to conduct safe required training and operational flights while minimizing impacts on the surrounding community. These course rules are designed to promote safe air operations, meet Navy aviation training requirements, and protect communities beneath established flight paths. Pilots are given annual course rule briefs to ensure their familiarity with course rules, procedures, and noise abatement measures. Currently published air operation instructions (course rules) advise pilots when departing NOLF westward to either fly 1/4 mile south of beach houses or cross over beach houses at or above 800 feet above mean sea level (300 feet above the Federal Aviation Administration's minimums set in Federal Aviation Regulation 14 CFR Part 91, see reference below) until they are near the communication station (old Navy Radio Receiver Facility). Weather conditions, other aircraft in the flight patterns, etc. can and do affect the aircraft's flight route and altitude. Federal Aviation Regulation 14 CFR, Part 91 Section 119, titled Minimum Safe Altitudes, paragraph d indicates that helicopters may be operated at less than the following minimums prescribed for</p>

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			<p>other aircraft, e.g. over congested areas, 1000 feet above the highest obstacle within a horizontal radius of 2000 feet of the aircraft, and over other than congested areas 500 feet above the surface. The NOLF is open for flight operations during Pacific Standard Time (PST) from the last Sunday in October to the first Sunday in April, Monday through Thursday, from 0800 to 2230 PST and on Friday from 0800 to 1800 PST. The airfield is open during Pacific Daylight Time (PDT) from the first Sunday in April to the last Sunday in October, Monday through Thursday, from 0800 to 2300 PDT and on Friday from 0800 to 1800 PDT. The airfield is closed from 1800 local time the day prior to and during government holidays. These prescribed days and times are needed to conduct the required training to sustain pilot ratings and deployment qualifications.</p>
19.	Jim Besikof	<p>I attended a briefing at the Coronado Cay Homeowner Association of your plans. After looking at the new fly patterns, your new plan will cause a lot of additional noise, in an already heavy fly over zone. Please reconsider your plan and move the flight patterns out to sea as far as possible.</p>	<p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic</p>

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			Environment) of the FEIS.
20.	Fred Brown	<p>I have lived here for 17 yrs and until recently found the Navy to be good neighbors. I appreciate the work you do and support your efforts.</p> <p>But... about a month ago after your announcement of planned increases in training the air activities and noise have become overwhelming to the point of intimidation. If this is a test to see how much noise we can tolerate, you have exceeded my threshold 4 weeks ago. I am very concerned that this will affect our quality of living and negatively affect our property values.</p>	<p>Increases in training activities associated with the Proposed Action and alternatives, which have not yet occurred, are not expected to disrupt normal business operations or affect property values in the ROI. As indicated in the Socioeconomic section of the FEIS (Section 3.15.2.3) regional and community employment, housing, and population growth are not expected to be affected by the Proposed Action.</p>
21.	Pat Brunson	<p>The noise from the helicopters is quite bad at our house but I can't imagine how all the birds in this area can take. Plus the air pollution from that pink smoke floating over the Strand can't be good for us or the wildlife.</p>	<p>Reproductive success is routinely measured by Navy-funded monitors under the Navy's biological monitoring program. Background noise levels are sufficiently high such that noise as a result of training activity increases would not result in detectable effects. Considering the current success of least tern and snowy plover, noise was not expected to be an issue.</p> <p>The Navy has a comprehensive air quality management program. Mitigation measures that are part of the Navy's air quality management practices are implemented at SSTC. Aircraft, marine vessels, ground vehicles, and military equipment are well-maintained, and meet applicable emission standards (such as smog certification for on-road vehicles) in accordance with state requirements. As indicated in Section 3.3.2.1.1 of the FEIS, emission factors for specific types of ordnance (including smoke grenades and flares) were obtained from the USEPA's AP-42 emission factor database. Section 3.3 and Appendix C analyze the pollutant emissions from all components of training activities presented in the EIS, and indicate that the emissions from all training activities are within air quality standards.</p> <p>There will be little use of smoke grenades and flares directly in or over water. Use per training event in which smoke and</p>

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			<p>flares apply is also small (2-11 items). In addition, this use is spaced out both in time and space throughout the year and at various locations within SSTC, so there are no hot spots of air pollutants on the ranges.</p> <p>Smoke grenade filler has approximately 11 ounces of a colored smoke mixture (white, red, yellow, green and violet). The smoke material is composed of a mixture of potassium chlorate, sodium bicarbonate, lactose, and a dye, none of which have—in the amounts or quantities specified in the EIS—significant environment effect. In addition, most of the filler is consumed during use. Chemicals in military flares can be a combination of magnesium, boron, potassium perchlorate, and barium chromate (USAF 1994), or in some cases red phosphorus. Red phosphorus is a common ignition compound used for instance in matches. Red phosphorus is a relatively non-toxic compound, although highly flammable and subject to environmental degradation in marine systems (Spangford et al. 1985, EFRB 2010). In an analysis of military flares, the US Air Force found that most of the common flare constituents were consumed during flare ignition. Residual ash from flares contained small quantities of magnesium and boron (USAF 1994). Measured values of magnesium in flare ash [86 part per million (ppm)] were found to be below the natural seawater composition of magnesium (1290 ppm).</p>
22.	Elizabeth H. Butler	<p>The letter below reflects several previous attempts to address the problems caused by intensified military air training over the Silver Strand. The current level of training has seriously impacted residents and visitors since 2007. We have not received any answers to reasonable questions or been asked to participate in co-creating alternatives. There are clear alternative helicopter routes and obvious means of notification and community education that would ease of the stress we live with. Only a few weeks ago we learned that we are part of a newly named Silver Strand Training Complex (SSTC) with high intensity, high profile maneuvers planned along the length of our State designated Scenic Route 75. Many City, County, and Federal funds and tireless volunteer and staff time and multiple interagency collaboration has gone into preserving the Silver Strand's scenic views, natural resources and unparalleled recreational and residential opportunities for military and civilians alike. Similar to the goal of the National Wildlife Refuge, we thought this area would be an outdoor haven for people and families in perpetuity. The projections in the proposed EIS do not reflect an understanding of this City, State and County</p>	<p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations in the western portions of the boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training</p>

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		<p>mission, but rather suggest a militarization of an area previously shared with residents, visitors and the natural environment. In closing this memo, I would like to emphasize one of the most troubling aspects, perhaps the most egregious aspect, of the EIS. The increase in helicopter operations from 700 to 2300 is in addition to the current daily low flying helicopters that fly back and forth over the eastern shore of the Cays, Grand Caribe, Loews, and the State Park during peak hours 3-10pm. In the summer, they can do circular patterns every four minutes, often going later in the night. Perhaps, this routine helicopter exercise is an area where we can dialogue with the navy about 'balance' and community respect for their neighbors of forty years.</p>	<p>consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>
23.	Elizabeth Butler	<p>What AIR TRAINING is planned for the peak summer months July - October 2009? What part of this is 'routine' NBC practice? What constitutes 'routine' flying: what are the designated patterns or paths; what are the allowed weekday daily start and end times; are there different paths or curfews for weekends and holidays? What is the allowed or legally mandated flying height for helicopters over densely populated residential and recreational areas (i.e., how many feet above rooftops and bathers on a beach is considered safe or even 'courteous'? ). Are there safety height regulations set by the FAA and are there military exemptions? Are there other FAA regulations that say helicopters should fly a certain distance from the bay or ocean shoreline? Are the helicopters who fly round and round paths up the channels of the Cays performing a sanctioned practice? What part will be "SPECIAL" TRAINING MANEUVERS involving squadrons whose home base is located elsewhere? What are the start and end dates of the 'special' maneuvers? What time of day will they begin and end? Will the impacted time be the same for weekends as weekdays? Are major holidays included? When there are AIRSHOWS (e.g., Redbull Races, Miramar Airshow) or ceremonial demonstrations (e.g., off the Midway museum) in the San Diego area, routine military practice and/or practice for the special event are often diverted over the Cays and the Silver Strand. What is the summer/fall schedule for these activities? ***** In the last two summers, the residents, real estate rentals, and</p>	<p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p> <p>A discussion of helicopter activity has been added to Cumulative; Section 4.3.6. The Section discusses the various squadrons based out of NASNI and the number of helicopter</p>

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		<p>other tourist businesses were not notified or prepared in any way for the negative impact of continuous low-flying helicopter and jet practice. This air activity is in addition to the advertising, fixed-wing planes which go back and forth above the State Beach and Park and often crisscross the Cays during summer months. The 'surprise' element of the last summers intense air activity evoked a range of negative emotions: fear from the 'high alert' noise and vibrations of helicopters; anger from having special family events and vacations ruined; and disbelief that all this was happening without notification from the City or any known public planning process. Trying to get information was difficult. People were referred to the navy control tower to make a "noise complaint" and asked to produce photographs of the plane, the number on the plane, the time and direction of the flight. The problem was not the disturbance produced by an aberrant, ill-trained, low-flying pilot. THE FEAR AND DISTURBANCE CAME FROM MILITARY TRAINING THAT COMBINED ROUTINE PRACTICE WITH INTENSIFIED SPECIAL MANEUVERS OVER A HIGH DENSITY RESIDENTIAL MARINE COMMUNITY, ABOVE A POPULOUS STATE BEACH AND A 450 ROOM HOTEL-RESORT, SCHEDULED IN THE HOTTEST, PEAK USE SUMMER/FALL MONTHS. This inquiry is a request for information. It is also a request for some 'balance' and courtesy in the planning of training exercises. My experience with the military in recent years was that military leadership valued the commitment to be 'good neighbors' to impacted communities. Last summer, the Navy was not a good neighbor; it exploited our previous goodwill and caused us many problems. Perhaps, leadership in the military and the City have attempted to address these problems in their monthly meetings. It would be helpful to know if the environmental impacts of air training are discussed and planned for in these meetings.</p>	<p>flights that these squadrons generate. The Navy AICUZ study is being updated to identify all flights generated from NASNI and NOLF.</p> <p>Your comment also addresses an issue that is outside the scope of this EIS. The NBC Commanding Officer has established air operations course rules for Naval Air Station North Island and the Naval Outlying Landing Field (NOLF, note formally known as NOLF Field) to conduct safe required training and operational flights while minimizing impacts on the surrounding community. These course rules are designed to promote safe air operations, meet Navy aviation training requirements, and protect communities beneath established flight paths. Pilots are given annual course rule briefs to ensure their familiarity with the course rules, procedures, and noise abatement measures. Currently published air operation instructions (course rules) advise pilots when departing NOLF westward to either fly 1/4 mile south of beach houses or cross over beach houses at or above 800 feet above mean sea level (300 feet above the Federal Aviation Administration's minimums set in Federal Aviation Regulation 14 CFR Part 91, see reference below) until they are near the communication station (old Navy Radio Receiver Facility). Weather conditions, other aircraft in the flight patterns, etc. can and do affect the aircraft's flight route and altitude. Federal Aviation Regulation 14 CFR, Part 91 Section 119, titled Minimum Safe Altitudes, paragraph d indicates that helicopters may be operated at less than the following minimums prescribed for other aircraft, e.g. over congested areas, 1000 feet above the highest obstacle within a horizontal radius of 2000 feet of the aircraft, and over other than congested areas 500 feet above the surface. The NOLF is open for flight operations during Pacific Standard Time (PST) from the last Sunday in October to the first Sunday in April, Monday through Thursday, from 0800 to 2230 PST and on Friday from 0800 to 1800 PST. The airfield is open during Pacific Daylight Time (PDT) from the first Sunday in April to the last Sunday in October, Monday</p>

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			<p>through Thursday, from 0800 to 2300 PDT and on Friday from 0800 to 1800 PDT. The airfield is closed from 1800 local time the day prior to and during government holidays. These prescribed days and times are needed to conduct the required training to sustain pilot ratings and deployment qualifications.</p>
24.	Harry Butler, Ph.D.	<p>It seems foolish to me that the Navy would jeopardize the health and welfare of local residents in order to prepare to fight those who wish to damage the health and welfare of Americans. There seems to be no recognition in the Navy's plans that piercing noise, especially helicopter noise, will cause harm to local residents including local Navy families. It isn't necessary for helicopters to fly low over homes and continuously circle over the bay, state beaches and residential communities regardless of nighttime hours, weekends and holidays. This routine practice which intensifies in the hot months is not necessary. Helicopters can fly over the ocean. The residents of South Bay have worked their entire lives in order to save sufficient money to live in this desirable community. We are hard working, patriotic, taxpaying citizens who deserve better treatment than what has been occurring over the past three years and what is being proposed now. Currently, helicopter noise causes nervousness, inability to relax and loss of sleep. There is a certain arrogance in the Navy which allows these unhealthy intrusions into private living space with no notice or consideration. I beseech the Navy to do two things: 1) Give additional time to the community to comment on this plan and make carefully researched suggestions. 2) Work with the community to consider alternatives to the noise and pollution impacts of current air training as well as the other more egregious elements of the proposed plan (as highlighted in the City's response). A cooperative plan that genuinely considers human needs for health, comfort and security would be a plan that benefits military families at the same time it benefits other local families. The Navy bruised its standing and respect locally by issuing an EIS that suggested that Americans employed in the military should "sleep in their own beds" while other Americans' sleep is dispensable. Please consider our needs as one.</p>	<p>Military training is continuous, evolving, and essential to keep pace with emerging requirements in the work place, e.g. new equipment, personnel turnover, and changing requirements to list a few. The Navy, like the other military services, must sustain and enhance individual, team, unit, and organizational skills and proficiency. Military training includes tactics, techniques, and procedures that must be rehearsed, refined, and recorded to certify Navy personnel (e.g. individuals, crews, teams, units, and organizations) qualified to carry out their respective assigned missions.</p> <p>Additionally, the training activities associated with the SSTC have been specifically analyzed in the resource sections of the EIS. The additional training activities that are not associated with SSTC have been analyzed in the cumulative section of the EIS. The Navy has analyzed the activities associated with SSTC with both the public and the environment in mind to achieve operational readiness while minimizing impacts to the surrounding area.</p> <p>The Navy appreciates the public involvement in the NEPA process. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30th.</p>

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25.	Cynthia Buxton	<p>The navy , and the military in general have become very good environmental partners. What can the Navy do to keep the wild quality at a maximum albeit the times it is using the beach for exercises? Are there covert training maneuvers that are more subtle or invisible, and less impacting to the land? Is there a way the local public might help or become a part of the solution? What activities could be done south of the first jetty on the public beach? Could the public be involved in mock rehearsals? And thereby reduce the impacts north? Would the Navy make use of the resources at the public pier? The public could be used to identify what is effective "covert" and what isn't? Can the Navy make use of areas that are not on the beach?</p> <p>I cannot know in full, nor I hope does anyone commenting that isn't in the Navy, but it would be honest to say, I do not know why after WWII, Korea, Vietnam, Desert Storm, and whatever post 911 is that now we find this expansion inescapably necessary. What are the alternatives considered?</p>	<p>The purpose of and need for these training activities are described in Section 2 of the EIS, which lists activities that require the use of beach or boat lanes, and those that can use inland training areas. Also as described in Section 2 of the FEIS, the Navy considered, but rejected, alternatives that included moving these exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action. Additionally, alternatives were eliminated that investigated the distribution of military activities to different locations within SSTC. While the Navy appreciates your recommendation for public assistance in rehearsals, the general public is restricted from participating in these training activities for both military security and public safety.</p>
26.	Cynthia Buxton	<p>The Navy is already doing a very good job. And I am very grateful.</p> <p>In the last year, along with a number of hot environmental issues, Sunrise Powerlink notwithstanding, I was made aware" of the MLPA by my environment colleagues volunteering day and night to establish sustainable guidelines for our oceans. Our local coast has many impacts, not only from the Navy and tourists, but in no small way from bait fishing and other commercial endeavors. What measures could the Navy take to help establish sustainable guidelines if they are to enter in larger capacity the current mix of impacting interest groups? The shore birds that are often the focus of marine environmental debate and concern depend upon this zone for survival. Unfortunately because the public has taken a zesty proportion of the urban share, there are few places for the birds to nest with reliable success.</p> <p>The preserve around the elephant cage happens to be one of them. The shore birds may also feed on sand crabs. What impact does vehicle traffic have on san crabs and in turn on the shore birds that feed on them? I think this question needs some research. I would be concluded that the traffic would reduce another food source for the birds.</p>	<p>Nesting areas for both the California least tern and western snowy plover have been established at the Delta beach areas, and mitigation measures are in place for nesting that occurs outside of these areas and within SSTC training areas. The concern for shorebird foraging is acknowledged; however, the best shorebird areas are avoided: mudflat, salt marsh, and salt pond. Beach wrack is left undisturbed (not raked). The remaining sandy shores and artificial structures are resilient to disturbance.</p> <p>The analysis of foot, and vehicle traffic and amphibious landings indicated that impacts to the intertidal zone where sand crabs may occur is expected to be minimal due to the highly dynamic nature of the intertidal zone as well as the high recolonization rate of the organisms that inhabit this zone.</p>

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27.	Cynthia Buxton	<p>I was taken aback by the notion that they Navy would run through the vernal pool when it is dry. Where do the critters go when it is dry? It is my understanding that they are still there, just dormant. (I mentioned a paper on diapauses?) Running across this area, kicking up the top soils, disturbing whatever vehicle the plants and animals and microorganisms have for staying alive suspended throughout a dry summer would be radically abused by playing and training there. Is there some way to build a mock cover over this area to protect it? Would such a cover work?</p> <p>This vernal pool is a beach vernal pool. Does this make it additionally rare and fragile?</p> <p>In our backcountry, our streams become corridors of algae parchment; a vehicle I propose may play a role to perpetuate the fauna that takes life when the streams are running. Does such a vehicle exist for vernal pools? If so, and the creatures are there, buried, how will you protect them in the dry season?</p>	<p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in negligible impact to population viability. Additionally, the Navy has consulted with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>Under conditions listed in the USFWS Biological Opinion, the Navy will complete a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection survey in the pools and their watersheds: plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will determine the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>

#	Name or Organization	Comment	Response
28.	Cynthia Buxton	<p>The Navy has been flying increasingly at night, and increasingly directly overhead, though since the public made considerable of it at the public forum, it may be a bit better lately. I have been nearly asleep to be awakened by the helicopters. Sometimes leaving the windows open is impossible to do. One day I came home to find that my dog had gone through, literally through, a large window out of fright from loud noises. I confirmed with the neighbors who heard the noise and the window crash. It cost hundreds and lost me thousands in down time as I had to rebuild the wall with three double pane windows and all new trim to hold them. I really had no warning or decision as to when. Several weekends were taken through the Christmas Season to finish the project.</p> <p>The YMCA is far closer than my house. I know how to extrapolate the meaning of training. Children at the Y may not. Many children that attend do so on scholarship as one of the first natural experiences or experiences at a camp they have ever had and for some ever will. The Y hosts over 10000 children every year. I know one such child, a woman now, who had difficulty learning in school. I saw many positive changes in her in the several seasons she attended this camp. She now pays her own way and holds a job with promotion and respect for several years. I think the Y played a roll in her turn around. In 1993 congressman Bilbray and Senator Boxer insured the continued existence of the Y for the next 50 years by establishing a 50 year least with the Navy. In 1998 the Navy decommissions the radar antennae, or elephant cage. I do not recall any loud noises back then. The Y Camp Surf has been in harmony with the Navy for many years prior as well.</p> <p>What can the Navy do to minimize the startling and even frightening noise around children?</p>	<p>Helicopters support several existing SSTC training events. Under the No Action alternative, up to 740 helicopters may be involved with SSTC training events. Approximately 100-150 helicopters per year fly into SSTC-S inland under baseline training. The remaining 590-640 helicopter operations occur offshore in the boat lanes or bay training areas.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p> <p>The effects on the sound environment at the Surf Camp of Navy training at SSTC-S are addressed in Section 3.6 of the FEIS. This analysis concluded that the changes in the YMCA's sound environment associated with the Proposed Action would be minimal. Therefore, no sound-related mitigation measures were proposed.</p>

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29.	Cynthia Buxton	I have found on occasion, cylinders, with warnings of phosphorous. What can the Navy do to ensure the refuse of their activities will be removed?	As presented in Section 3.4 of the FEIS, most of the training materials used at SSTC are non-hazardous, or are rendered non-hazardous when they function as designed (e.g., blanks). Trainees collect and remove expended materials to the extent practicable at the conclusion of their training events. Very rarely, energetic items may not function as designed, resulting in their temporary presence until promptly retrieved by Navy personnel. The incidence rate of unretrieved expended items that would pose a risk to the public is so low that a public education and outreach program is not warranted. Given the extent of recreational, commercial, research, and industrial operations in the ocean and bay waters adjacent to SSTC, a wide variety of non-military wastes accumulate on the training beaches. In the event of finding expended material, contacting the POC at Naval Base Coronado will ensure that a team will arrive at the site, identify the item, and ensure its proper disposal.
30.	Cynthia Buxton	I have seen whales breaching offshore during migration times. What can the Navy do to ensure the safety and integrity of these mammals? What research and precautions can you do to protect their sonar capabilities near yours as it is vital to their survival?	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities and mitigation measures to achieve operational readiness while minimizing potential impacts to the surrounding area. As described in the EIS (Section 3.9), Navy personnel monitor "buffer zones" surrounding activities that may cause underwater noise for the presence of marine mammals or turtles. If an animal is observed in one of the buffer zones, the activity is suspended until the animal is no longer within the buffer zone.
31.	Cynthia Buxton	Have you reviewed the original grant to the Navy for use at the Southern end? I think this needs to be done. The EIS mentions a grant for the Navy when they were established there of fee simple. I have a question about this. Have you reviewed the original grant to the Navy for use just north of the Northern end of Imperial Beach. I think this needs to be done. See below an explanation from **Wikipedia on line. Fee Simple can be absolute or it can be fee simple defeasible. Fee Simple defeasible can be fee simple determinable and fee simple subject to a condition subsequent. Since the Navy suspended the use of the radar tracking and because the use by the children and family camp at the Y is well understood and established I find it hard to believe that in the establishment of the Navy grant with children present and the public walking	Based on property records, SSTC-S comprises about 548 acres of land that is held in fee-simple by the Navy. SSTC-S is owned by the federal government down to the mean high tide line.  Additionally, the Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing

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		through, that the intention was that of fee simple absolute. I especially find it difficult to believe that that intention included the sounds of bombs bursting in air, so to speak. Have you checked to see what the stipulation was in the grant when the radar was no longer used and what was that intention? Who provided the grant? What were its conditions? It makes more logic that the Grant with an intention of mitigating the military usage of the beach originally, would include the portions used by the Y for families. I would not be surprised If the level of review were still in place to curtail an activity or in this case <i>life</i> frightening noises near the camp with fee simple subject to a condition subsequent.	potential impacts to the surrounding area. In light of this proximity, the Navy has developed mitigation measures for activities that may impact the environment or surrounding area, and has presented these measures in the EIS.
32.	Cynthia Buxton	What can the Navy do to reduce the noise for training? I do understand there comes a time when training has to include operating under the startle of noise. Can this portion happen somewhere else? Can the solution integrate with the public presence as much as possible?	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness and realistic training while minimizing potential impacts to the surrounding area. In this manner, the Navy is adding additional mitigation measures for alerting the adjacent communities about events which may be considered intrusive, as well as posting signs and other controls about public access to the beaches. Additionally, and as described in Section 2 of the FEIS, the Navy considered, but rejected, alternatives that included moving these exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action.
33.	Earle Callahan CDR USN (Ret)	I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I agree entirely with the Navy plan. Their training is a necessity for the defense of the United States! Those that think otherwise should spend some time in/with the military, and see for themselves, and quit complaining. These Navy men/women training are willing to give their lives for their/your country, and do the local citizens' contributions and complaining match that? The Navy did provide for the least terns on the bay side and it is fenced off, which was Navy property.	Your comment has been noted.

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34.	Earle Callahan	<p>If anyone complains about the necessary Navy exercises on the Strand, they really must be pacifists, and un-American. All they can do is complain when they are living in the greatest country of the world, and probably none of them would fight and die for their country like the men/women on the ships and beaches at these exercises. They gladly prefer others to do it, so they can complain, and enjoy their good life in the USA. The Navy has already given lots of bay front property for the protection of the least terns, and even fenced it off. As far as water pollution, ask Tijuana to quit dumping sewage into the Tijuana River. When it rains, even the old tires and garbage ends up on U.S. beaches all the way to Coronado, when it follows the north flowing eddy currents from the south. Imperial Beach surf is always contaminated with Mexico's sewage. That is worth bitching about, and not the U.S. Navy maneuvers getting ready for battle!!</p>	Your comment has been noted.
35.	Benton Calmes	<p>Add a sensitive receptor in Imperial Beach at Oneonta Elementary School. Noise extends further south than EIS indicates.</p> <p>Reduce helicopter overflights in general. NO helicopter overflights over residential neighborhoods. I saw no reference to this in the EIS but it happens in Imperial Beach all the time.</p>	<p>The FEIS identifies Mar Vista High School and West View, Bay Side, and Imperial Beach Elementary Schools in Imperial Beach as noise-sensitive receptors. Oneonta Elementary School is located to the south of these schools, and would experience lower sound levels from military training activities on SSTC-South; however, this school has been added to the list of potential sensitive receptors in Imperial Beach.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>

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36.	Ted Camaisa	<p>Amphibious landing craft training poses minimal risk to the safety of residents living on Silver Strand. However, the increase in aircraft sorties in a combat training environment poses significant risk to residents in Navy Housing and the Cays. The Navy does not need another incident where an aircraft goes down on civilian housing, when realistic training could have been held in a low risk area like Camp Pendleton. Our pilots need to focus on realistic and unencumbered combat training, without concern for endangering residential homes.</p>	<p>The Navy strives to be a good neighbor, and analyzed all training activities at SSTC with respect to applicable federal regulations. The location of training has also been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Section 2.1.3 of the EIS explains why the Navy cannot conduct these training activities in alternate locations. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), Silver Strand was determined to be the best location for training among the identified alternatives.</p> <p>San Diego Bay is at the center of a complicated airspace. The Navy has analyzed its flight tracks in the area for safety, as discussed in Sections 3.16.3.2.2 and 3.16.3.3.2. The Navy has determined that risks to the public from rotary-wing aircraft supporting SSTC training are minimal, based on its past safety record, the low number of flights, and the over-water flight paths. Flight tracks originating out of NASNI travel offshore and over the middle of San Diego Bay before accessing training areas to limit potential impacts to nearby communities.</p>

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37.	Joan Cameron	The helicopters begin practice well before the time this is written. Today I heard them by 4:30AM!	The current scope of the helicopter noise analysis is summarized in Section 3.6 of the EIS. As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.
38.	Jim Cavanaugh	This is absurd... we need our military to be first in the world... stop trying to thwart them... support them.	Your comment has been noted.
39.	Jennifer Chapman	As a resident of IB, I appreciate the military base and what it brings to the community. That said, please consider strongly any nighttime noise (2200 to 800). I don't care about daytime noise, but anything before 8am is a concern. At night I often hear helicopter noise emanating from Navy, local police, and border patrol. I also heard substantial noise that woke me up (and I sleep tight) and kept me awake when Transformers II was filmed at the Radio premises in the southern end of the Silver Strand. Since no one told the neighbors in IB, I thought that it was related to the violence in Tijuana, or something bad happening in IB. Please remember that you are not the only group and that the effect of all the noise is cumulative, and can actually be very frightening. Please avoid all noise possible from 2200 to 800 and give IB residents advance notice if you're going to have a night where you make noise anywhere approaching the noise made during the filming of Transformers. Thank you for all you do for our country.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the adjacent neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.
40.	Jennifer Chapman	Please be sure to inform IB residents individually and directly (by a paper notice to each abode, for instance, not just by posting something on a website no one from IB reads regularly or posting a notice in a newspaper), if there are any Hazardous Materials or Wastes relating to this proposal known now or discovered in the future.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy does notify local public safety agencies and city governments about specific upcoming high-noise night training events. Local governments, in turn, are

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			responsible for informing their communities. The Navy is adding mitigation measures to the Proposed Action for alerting the adjacent communities about events which may be considered intrusive, as well as posting signs and other controls about public access to the beaches.
41.	Jennifer Chapman	I like to jog on the beach side of the Silver Strand with my dog. Please ensure I continue to be able to do so! Also, I noticed the new big signs on the beach north of Palm (by the surf camp). You might think it's common sense to say people have to stay below the "mean" tidal line, but it doesn't. I assume you mean average by saying "mean," but when I'm on the beach, I only know where the tide is at that moment. It changes seasonally and daily and yearly, and can also depend on whether sand rejuvenation projects (sand dumping) happen. So please clarify whether you mean that we have to stay below where the vegetation grows, or what? Also, many hispanic-only speakers come to the beach, and if I have trouble understanding what is meant, I think non-native speakers will too.	As stated in Section 3.1.2.2.2 and 3.1.2.3.2 of the SSTC EIS, the Navy would not preclude the public from access to the public beach adjacent to an active training area. Active training does not typically occupy the entire stretch of beach at SSTC-S, but rather one or two training lanes. The public would be able to continue to use public beach adjacent to active training. On SSTC-N there is no public beach. The entire beach, including that portion of the beach below the high tide line, is leased from the State of California to the Navy for exclusive military use. On SSTC-S, the Navy owns the beach down to the high tide line. The State of California owns the beach below the high tide line. The Navy is adding mitigation measures to the Proposed Action for alerting the adjacent communities about events which may be considered intrusive, as well as posting signs and other controls about public access to the beaches.
42.	Jim Clifford	An important issue I don't see addressed anywhere relates to a major step the Navy took a few years ago the last time they sought public input re these beach areas - they Navy tried to close about 2 miles of beach between the ymca camp and the south end of the state beach. this area has for many years - if not since time immemorial - been open to the public and is one of few beach areas of significant length in san diego where beachgoers can walk or run with their dogs. what i saw happen was that the day the navy tried to close the beach, the public simply wouldn't stand for it and defied the orders of navy security staff on the beach and simply walked up and down the beach right past obstacles the navy tried to use to prevent the public from entering the beach. it is troubling that the navy used such poor judgment in even considering trying to close this beach to which the public has always had such a long and strong connection and that they navy either didn't think thru or actually was ok with putting their security staff in a hugely problematic position of trying to stop the public by what? - arresting or shooting decent taxpaying citizens who simply can't believe the navy would be so arrogant as to presume that there is any reason for the navy to abscond with 2 miles of beach which should remain as it always has - open to the public?! so my concern at this time is whether in the midst of this ridiculously long document describing the navy's latest project for this beach there may	As stated in Section 3.1.2.2.2 and 3.1.2.3.2 of the SSTC FEIS, public access to public beaches adjacent to active training areas would continue to be allowed. Active training does not typically occupy the entire stretch of beach at SSTC-S, but rather one or two training lanes. The public would be able to continue to use public beach areas adjacent to active training areas. On SSTC-N there is no public beach. The entire beach, including the beach below the high tide line, is leased from the State of California to the Navy for exclusive military use. On SSTC-S, the Navy owns the beach down to the high tide line. The State of California owns the beach below the high tide line. Access below the high-tide line would only be restricted during some training activities for either public safety or

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		somehow be a hidden agenda of again trying to close the beach? if so i'm sure they navy has learned they will have to string claymores to pull it off this time and even then they may have to explain some severed body parts (human and canine) in the national news for awhile. i wish i could view the navy and dod as being sane enough that we wouldn't have to even imagine the navy trying to close this beach but based on what i saw just a few years ago i see we have to be ever vigilant for some wash dc dod bureaucrat to come up with another arrogant and brilliant idea of affronting the very public whose tax \$ fund everything the dod does thru out the world. so - to wit - is the navy in any way planning to curtail any public access to any of the beach between the ymca camp and the south end of the state beach (silver strand)?	mission security.
43.	Lois Cohen	NO! On increasing training along Coronado's coastline! Unfair to Coronado and really a bad idea.	Your comment has been noted.
44.	Mark Conrad	The noise level of the helicopter flying up and down the bay side has increased almost every year that we have lived here over the past 10 years. Often in the summer the sound is so loud it is difficult to carry on a conversation outside. We in the Cays will now have it on both sides if this goes into effect. This is a residential community and the Navy can use camp Pendleton which has many miles of beach and without the impact of the noise to residents. This will be negative impact on all of us.	<p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS. A discussion of this helicopter transport will be included in the Cumulative Impacts section of the FEIS, Section 4.3.6.</p> <p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. Possible alternate locations for training</p>

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			have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training.
45.	Mark Conrad	The terns have their nest along the shore lines and you suggest in your EIS draft that it is going to have little effect on the nesting. I think the noise itself will drive the birds away. The traffic and surely destroy many of the nest.	This is a high ambient noise environment in which nesting persists. Navy has achieved nesting success adjacent to the North Island airfield, which is a very high noise environment. As presented in Section 3.12 of the EIS, many of the noise inducing activities involving pyrotechnics, simunitions, and blanks take place inside bunkers, which reduces the intensity of noise that reaches nesting areas and other adjacent habitat.
46.	Mark Conrad	Grunion along this beach have been laying their eggs in great numbers. In fact at high tide and full moon the beach is crowded with many people fishing for them. The demolitions and other activities of the Navy will have negative effect of the grunion.	It is probable that both excavation and crushing effects from landings would be localized. Overall species assemblages would be unaffected considering extent of adjacent habitat and infrequent nature of intrusive activities. Overall impacts to specific fish species and assemblages from underwater detonation activities would be temporary and local considering the expansive nature of the adjacent habitat, the population size, and dispersed nature of potentially effected fish populations.
47.	Mark Conrad	There are many clams along the beach and I often go out at low tide and collect the legal limit. The impact of training and traffic will have negative impact on the clams.	The EIS noted that training activities could have impacts on marine plants or invertebrates from sediment disturbance caused by compression of the beach below the high tide line. However, all such disturbances would be highly localized and short term, given the highly variable intertidal environment, and would not have any lasting effects on plants or invertebrates. Additionally, invertebrates recolonize quickly because that is what they are adapted to do in a shifting environment; for instance, invertebrate beach dwellers tend to be very fast burrowers in the surf zone

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48.	Mark Conrad	The noise and loss of the beach will have a negative impact upon real estate values in the area.	The SSTC training areas have been used by the Navy for over 60 years. Increases in training activities associated with the Proposed Action and alternatives are not expected to disrupt normal business operations or affect property values in ROI. In addition, there will not be a loss of beach area as a result of implementation of the Proposed Action. The analysis presented in the FEIS determined that regional and community employment, housing, and population growth would not be affected by the Proposed Action.
49.	Elizabeth Copper	<p>I do appreciate the opportunity to comment and as a contractor privileged to work with the endangered birds at Naval Base Coronado I applaud the Navy's many years of efforts on behalf of natural resources at their facilities at NBC. The military and particularly the Navy deserve the primary credit for increases in the population of the California least tern having pioneered the methods and set the standards that are now applied at successful sites throughout the range. Because of their outstanding efforts the Navy has been given significant regulatory relief to address the constraints imposed by the presence of such species as the least tern and the Western snowy plover. The benefits to the terns of this bargain and the significance of these efforts were clear in 2009, when NBC supported 22 percent of the least tern nesting attempts in California. NBC also supported the second largest population of nesting snowy plovers in Recovery Unit 6 and fledged as many young as sites with larger populations.</p> <p>This Environmental Impact Statement (EIS) represents a lengthy effort to identify points of conflict between endangered species' management and Navy training and address potential resolution of those conflicts. However, the current status of the California Least Tern and the Western Snowy Plover neither of which is faring well, is not clearly portrayed in the EIS which may mislead the public regarding the potential consequences of the proposed actions.</p>	<p>The DEIS has been amended to explain the level of loss anticipated for the California least tern of the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The difference in incidental take for snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year. As indicated in the July 7, 2010 USFWS Biological Assessment, the Navy will implement mitigation measures to schedule training in areas where less nesting occurs, when possible, and still meet training needs. In addition, the Navy will consider the tidal stage when developing training schedules, and schedule training activities that could be conducted on the hardpack during low tides when consistent with training needs. The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy provides visual references that identify sensitive nesting areas. The Navy may affix signs to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>The extensive monitoring program that the Navy implements has allowed for adaptive management to ensure avoidance and minimization of take, as well as positive contributions to recovery of both species. Nesting activity has increased despite the average historical annual loss of 38 nests (Figure 3.12-9), indicating a capability of the species to not only</p>

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			<p>continue to persist on SSTC, but also to increase, with training occurring in the nesting beaches during the nesting season. Much of this has to do with the Navy’s mitigation measures and management practices. Based upon the available data, training activities at historical and proposed levels appear to be compatible with persistence of the least tern and western snowy plover at SSTC. Nesting areas have already been set aside on the bay side of the Silver Strand that exceeds the mitigation required for all past and current consultations. The Long Term Site Enhancement Plan which is part of the Proposed Action could increase the carrying capacity for terns by hundreds of nests. For snowy plovers, the long-term site enhancement plan is estimated to realistically mitigate for 34 nests annually.</p>
50.	Elizabeth Copper	<p>Since 2001, Least Tern reproductive success in San Diego County has been declining with the steepest drops being seen at sites around San Diego Bay. This downward population trend is not addressed in the EIS. Methods for calculating population figures are under review and are relevant to providing a clear picture of the status of the species prior to approval of increased adverse effects. In 2009, only 72 young least terns fledged from Naval Base Coronado sites from 3,232 eggs laid and 2,364 chicks hatched. The losses are in no way attributable to the Navy, which has been diligent in attempting to reduce the predation that is the primary cause of these losses but it is nonetheless in this context that increased take is being sought by the Navy. It is NBC’s 22 percent of the statewide population that suffered near complete reproductive failure in 2009. Both the increasing reliance on NBC and San Diego County military facilities to support the tern population and the declining populations at these sites suggests a need for the most diligent evaluation of projects that may adversely affect these birds.</p> <p>In 2009, NBC supported almost one third of the snowy plover nesting population in San Diego County. Unfortunately, while the population numbers have wavered , breeding bird survey results in 2009 showed the entire coastal population to be down by 12 percent from what was recorded in 2005 despite aggressive management efforts throughout the range. The minimum number of pairs at NBC in 2009 was only 35. In addition to problems of predation and habitat loss, in San Diego there has been a continuing occurrence of unexplained adult mortality with 15 adults found sick or dead at NBC in 2009 alone. This gloomy context needs to be clearly provided in the EIS to enable the public to evaluate the potential consequences of project approval.</p> <p>The absence of the Biological Opinion (BO), the U.S. Fish and Wildlife Service’s review and response to the proposed actions, from this Draft EIS fatally handicaps the ability of the public</p>	<p>The information and mitigation measurements from the July 7, 2010 Biological Opinion have been input into the appropriate sections, and the mitigation measures will be updated as well. Additional analysis has been provided in the FEIS on the indirect and direct impacts of current and proposed military training, to include both an average anticipated impact as well as a high-intensity anticipated impact (See Section 3.12.3.1 (4), for example). Mitigation measures have been added to the Proposed Action. The benefits of current and proposed mitigation are also described and quantified to the extent practicable. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1) and the western snowy plover (Section 3.12.3.2) to provide a more in-depth analysis of impacts that training is expected to have on the species.</p> <p>Predation is discussed in Section 3.12.1.3.1; California Least Tern and Section 3.12.1.3.2; Western Snowy Plover. Gull-billed tern predation studies are underway by the Navy and other funders (including USFWS), and the Navy has requested</p>

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		<p>to review the consequences of the proposed actions. The discussion of the complexity of the endangered species issues, e.g., downward population trends, plover adult mortality, unresolved predator issues, variation in management approaches, lack of control of public access, and perhaps most importantly the take allowances, reasonable and prudent alternatives and terms and conditions that will be applied to minimize loss, is accessible only in the Biological Opinion. I do not believe the public can adequately evaluate the impacts of the proposed alternatives until that BO is included. The 30-day time period between circulation of the Final EIS and publication of the Record of Decision would be inadequate to review the relationship between the Biological Opinion and the proposed actions and therefore the EIS should be re-circulated as a Draft including the Biological Opinion.</p>	<p>approval to relocate gull-billed terns from USFWS, without success. The Navy is working closely with the USFWS to assist it in addressing gull-billed tern predation. The Navy has submitted an application for a depredation permit to the USFWS annually since 2005 and has continued to document the impacts of this species. The Navy is supporting a radio-telemetry study by San Diego State University and USFWS during the 2010 nesting season. This study will research movements of gull-billed tern around San Diego Bay and analyze diet through stable isotopes.</p> <p>A Biological Opinion has been provided by USFWS (9 July 2010), and its contents are incorporated in this EIS. The incidental take of California least tern is described in this Biological Opinion as: up to 8 percent per year of least tern eggs and chicks at SSTC North beaches; up to one least tern adult; and up to 10 nests moved. For western snowy plover, the incidental take is described as up to one active nest; up to five plover chicks; up to three nests moved; and up to three nests abandoned and brought into captivity.</p> <p>Finally, among other avoidance and minimization measures that are Terms and Conditions of the Biological Opinion, the Navy will be coordinating with the USFWS in the development of the Long Term Habitat Enhancement Plan for SSTC.</p>
51.	Elizabeth Copper	<p>Knowing how dramatically the nest numbers of the terns on the beach increased at NAB Ocean, I can understand that someone unfamiliar with plover biology might be fearful of the same kind of problem arising with the plovers. However, their nesting strategies are completely different. Neither snowy plovers nor any of their relatives nest in dense colonies anywhere in the world.</p> <p>The snowy plover population in Recovery Unit 6 is unstable, has not met the Recovery Unit goals, and needs more aggressive management not less. The call for a cap on the number of plover nests to be protected is seemingly contrary to the mandate to recover this species. The justification offered for the cap suggests a misunderstanding of how plover nests are protected and does not take advantage of other opportunities to support training and minimize take. In</p>	<p>The Navy has proactively prepared for the expected take through actions taken prior to this request for take. This has been through site enhancement, management of lane usage, nest protection, and monitoring. Snowy plover nests are not necessarily going to be taken, just not protected over the 22 proposed. As a mitigation measure, the Navy will mark and buffer up to 22 concurrent snowy plover nests established at SSTC-N and SSTC-S beaches plus any additional nests that</p>

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		<p>2.1.3.7 in the discussion of the proposed cap, protecting no more than 22 simultaneously active plover nests in SSTC-S and N combined, is identified as the only way to prevent the presence of protected plover nests from rendering the beach lanes unusable. This is apparently based on some assumptions which are not correct or are not likely to occur. While the worst-case scenario could occur in which three plover nests would be established in a line at the crest 30m apart, this would not result in establishment of protected areas that would preclude the use of a beach lane. The size and configuration of the buffers provided for the plover nests is not to exceed 30m on a side but is often much smaller and nest marking has always been done to satisfy both the protective needs of the plovers and to accommodate training activities. The presence of 3 simultaneously active nests in the training lanes occurred twice in 2009 once in Yellow 2 and once in Red 1, the most heavily used training beaches at NAB Ocean. The calculation that 22 simultaneous nests would equal 2 nests per training lane is somewhat misleading as plover nests have historically been established in 9 of the 10 beach lanes at NAB Ocean and five of six beach lanes at NRRF (4 of them are training lanes)= ~1.67 nests per lane.</p>	<p>exceed 22 that are initiated in beach lanes Orange 1 and Orange 2.</p> <p>The FEIS explains the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs, and chicks prior to and after all military training exercises, to allow assessment of take associated with training activities.</p> <p>The Navy has now added a more moderate scenario than the worst case scenario previously submitted in the Draft EIS, with results that are believed to be more realistic (see Section 3.12.3.1).</p> <p>Finally, the Navy's Proposed Action includes: ongoing nesting site preparation at the Delta Beaches; predator management; population monitoring; a Long Term Habitat Enhancement Plan; and measures to eliminate unauthorized recreational trespass, which are all conservation measures that support the recovery of the least tern. The Navy expects that implementation of these conservation measures will maintain the suitability of least tern habitat within the action area over the long term. The Navy's actions will increase the capacity of oceanside beaches and the Delta beaches to accommodate least terns and snowy plovers.</p>
52.	Elizabeth Copper	<p>The provision of protected beach lanes has resulted in a clear concentration of plover nests in the protected lanes with 60 percent of the nests at NAB Ocean being established in those protected areas in 2009, achieving the goal of minimizing the effects of plovers on training and maximizing their nesting potential. Adding training in the protected lanes and removing the protective markers may disperse what nests are established into fully active training lanes and increase the likelihood of plover loss while decreasing the protection provided. The creation of the protected areas was a minimization measure which was successful but removal of protection should require more mitigation not lessen the existing protection with a cap. Without the Biological Opinion it is not possible to know how FWS has viewed this adverse result, what additional take would be allowed, how the allowance is justified, and what compensation is required to mitigate for the increased vulnerability.</p>	<p>Impacts to military training cannot be calculated on an acreage basis as you've suggested, because of the way training is conducted. Under current training conditions, as listed in Section 3.12 of the FEIS, Navy training officers are notified of the locations of the nests and buffers, and plan their training activities to avoid entering the buffer areas. A few training activities, such as individual basic physical fitness activities, may be able to work around the training buffers. These activities incorporate identifying and avoiding plover nest and</p>

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		<p>The concern that two active nests would significantly impede training is belied by the fact that throughout the season in 2009, in many weeks, three of the training lanes at a time supported two active plover nests each. The calculation that 2 nests would obstruct 12 percent of a lane is also misleading. While 60m is approximately 12% of the length of a lane, even if the nests were lined up in a way that resulted in a 60m long line the actual acreage of the area protected by maximum buffers provided for two nests is only 0.4 acres (30m x 30m square)—only 3 percent of the acreage of the smallest training lane.</p>	<p>buffer areas into the activity. Other training does not require the use of beach areas, and thus would not be affected by the presence of plovers. Most other activities, however, are unable to operate around the buffers. The buffers are artifacts on the beach that do not occur in real world wartime situations, and thus adversely affect the value of training (e.g., presence of the plover nests restrict flexibility for maneuvering across the beach and inhibits real-time, tactical decision-making). Personnel may also focus on the stakes and no-go areas rather than learning their training mission. Restrictions imposed by stakes during training may lead to habitual avoidance measures and self-imposed concentrations of personnel, even in a combat environment, due to repetitious training with excessive staked boundaries. Activities involving heavy equipment and vessels require large unconstrained maneuvering space without encumbrances, precluding areas with buffered plover nests. To accommodate training requirements for these activities, the activities are often shifted in their entirety to the north or south, far enough away from the buffers so that personnel and equipment will not encounter or see the buffers/stakes. Under current conditions, this approach is feasible. Where needed, training activities can and are moved to other available training lanes that are free of plover nests or contain a maximum of two plover nests at one time. SSTC has historically typically had less than 22 active nests, at most, at one time. With the anticipated increase in training tempo of the SSTC training beaches (see Sections 1.5.1.1 and 3.12.3.1), training activities may not be able to be moved to other less encumbered beach lanes like they can be and are under current conditions.</p>
53.	Elizabeth Copper	<p>The protected beach lanes offer a benefit in concentrating plover nesting and tern nesting contributing to a reduction in the number of nests in the regularly used training lanes and the potential for interference with training. Nesting density was higher in the protected beach lanes (8, 9, and 10) with a maximum of 5 simultaneous active plover nests occurring in a single lane at one time. Even with 5 simultaneous active nests protected by the maximum 30m square buffers the smallest beach lane would have no more than 8 percent of the lane lost to the protected plovers.</p>	<p>The Navy intends to enforce public access management of beach areas, and to assure the quality of the Delta Beach sites (which are not at capacity). The Navy's current and proposed mitigation measures more than compensate for any loss that could occur due to the Proposed Action, see FEIS Sections 3.12.3.1 and 3.12.3.2. The overall impact is expected to be low</p>

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		<p>Even with 22 nests, simultaneously active, in beach training lanes with each given the maximum 30m square the acreage moved from training availability would be less than 4.4 acres of the 191+ acres available (128 –NAB Ocean; 63.9 –SSTC S). If all 22 simultaneously active nests were established only at NAB Ocean, using the maximum buffer they would occupy 3 percent of the training lane acreage. If the number of simultaneously active nests were doubled to 44 but the buffer was halved the area occupied between SSTC S and SSTC N would still be only 2 percent of the beach. This is but one minimization measure that might be recommended if needed. Again, the absence of the Biological Opinion does not allow the public to evaluate the consequence of the proposed actions.</p> <p>Knowing how dramatically the nest numbers of the terns on the beach at NAB increased, I can understand that someone unfamiliar with plover biology might be fearful of the same kind of problem arising with the snowy plovers. However, their nesting strategies are completely different. This is not a species that ever nests in large or dense colonies. Even the current density found at NBC is exceptional. The differences cannot be emphasized enough and their requirements for recovery are not currently being met.</p> <p>There is not adequate compensation identified for increased losses of terns and plovers that may occur as a result of heightened training tempo in what are the most concentrated nesting areas. The lack of adequate compensation is of particular concern in light of the continued reproductive failures at these sites for the last eight years.</p>	<p>as provided in the revised impact analysis of birds in Sections 3.12.3.1 and 3.12.3.2 of the FEIS, as well as the USFWS Biological Opinion, which concluded that with implementation of mitigation measures, training activities would not jeopardize the continued existence of ESA-listed species. The conditions of the Biological Opinion have been integrated into the FEIS, and are briefly described below. The Navy will consider the tidal stage when developing training schedules, and schedule training activities that could be conducted on the hard pack during low tides when consistent with training needs.</p> <p>Under baseline conditions, the southern three beach lanes are marked to facilitate avoidance of tern and plover nests. Since the Navy has determined that the level of marking done under baseline conditions presents an impediment to training, the Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy may entail signs affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>If relocation of any least tern or snowy plover nest/egg is necessary as a protective measure, each nest or egg will be relocated the shortest distance possible into suitable habitat by USFWS approved monitors to increase the chances of nest success. The weekly reports to be submitted to the CFWO under the proposed action will include: a) date the nests/eggs were moved; b) number of nests/eggs moved; c) original and ending location of nests/eggs moved; and (d) distance the nests/eggs were moved.</p> <p>The Navy will include the following information in the yearly reports to be submitted to the USFWS under the proposed action: a) the number and distribution of terns and plovers observed in each training lane; b) the number of any dead or injured least terns or snowy plovers (including eggs, chicks or adults) observed in each training lane; c) the hatching rate of terns and plovers in each beach lane; d) maps of the locations</p>

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			<p>of tern and plover roosts within the action area; e) the timing and number of training events within the southern three beach lanes, and other beach lanes, to the extent available; f) the date and condition of any dead or injured tern or plover; and d) any measures taken to prevent additional tern or plover death or injury.</p> <p>The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs and chicks prior to and after all military training exercises, to allow an assessment of take associated with training activities.</p>
54.	Elizabeth Copper	<p>The level of unrestricted public use of all the training areas is not accurately portrayed with the beaches at NAB Ocean being described as closed to the public so that the effect of the removal of protective markers in the southern lanes would not be significant. The beaches at NAB Ocean are used constantly by the public coming both from Coronado and from Silver Strand State Beach as well as by people from nearby military housing. The NAB beach has been identified on the Park website as a recommended walk from the adjacent State Park. Despite military presence, suspected vandalism of snowy plover nests and take of snowy plover chicks has been documented at NRRF. Vandalism of Navy property in the training lanes is also a regular occurrence. Off-leash dogs are constantly present at NRRF. The signs providing rules and identifying training areas are few, many of them have fallen down, some are covered with graffiti, and all are ignored. There is currently little to no enforcement by military personnel of restrictions on recreational activity. The ability to control public recreational activity is critical to any successful resources program regardless of the project alternative approved.</p> <p>The Delta beaches which are mitigation for the loss of least tern nesting habitat at Naval Air Station North Island need to be evaluated for the presence of contaminants. The sites are subject to management constraints based on the presence of ordnance and have not been evaluated for contaminants. The presence of the former argues strongly for evaluation of the latter. Future clean-up of ordnance may affect the availability of these sites. As the Delta beaches are the fallback nesting location for terns and plovers displaced by increased training at SSTC the quality of the sites should be assured.</p> <p>I applaud the efforts the Navy has expended in its management of endangered species at NBC and it is the Navy's demonstrated ability to support both training and natural resources that has set the standard for resource management for much of the country.</p>	<p>The Navy is not proposing to remove protective marking on the southern three lanes of SSTC-S, nor was this stated in the FEIS. As indicated in the USFWS Biological Opinion and described in the FEIS, the Navy will improve the delineation of base boundaries to facilitate improved enforcement in these areas. This enhancement will include the installation of improved signage, k-rails, and a guard shack. At SSTC-N, temporary barriers and improved signage will be used to more clearly notify the public of the Navy's exclusive use of SSTC-N beach and existing restrictions on public use of those beaches.</p>

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55.	Shannon and William Davis	<p>Training at the expense of endangered species is our concern. Endangered species are to be restored to a point that they are removed from the federal list.</p> <p>We are opposed to the training activities, if you won't put protective fencing around each Endangered San Diego Fairy Shrimp's Vernal Pool habitat complex at the Navy Silver Strand Training Complex. Without fencing, foot traffic, military dogs, and vehicles may irrevocably destroy, by crushing impacts, the cysts, eggs of the San Diego Fairy Shrimp in dry season. While the EIS states it will try to avoid the vernal pools when they are wet, it clearly states that it expects there to be foot traffic in dry season.</p> <p>The Navy is committed to complying with all applicable federal law, regulations and policies. Current management of vernal pools restricts all activities from the pools at all times. Environmental programs and policies have been developed to protect and improve air, water, and land, cultural resources, and national resources. The protection of natural and cultural resources has become an integral part of planning for training on S.S.T.C. However, the protected sanctuary of the vernal pools is about to change for the worse from foot traffic, other traffic, pyrotechnic chemicals, and hydrocarbon residue from overhead aircraft. Chemicals introduce poisons into the pools. Hydrocarbons cover the surface of the water and restrict oxygen from the air reaching the water in the pools. Over time, the cumulative effect leads to destroying the ecological habitat of the vernal pool.</p> <p>The San Diego Fairy Shrimp (<i>Branchinecta sandiegonensis</i>), species code K049 101, has been designated an endangered species in 1993 by the federal Environmental Protection Act of 1973. Why not designate 6 acres as a fairy shrimp pool complex preserve as the pools are separated on the order of meters? Currently, it looks like there are three complexes of pools at S.S.T.C.-S. In that the antenna array is no longer being used, which has a diameter of approximately 944 feet, that has an existing perimeter fence around this antenna array, which occupies an area of approximately 16 acres and could add 10 new available acres for training and set aside 6 new available acres for the fairy shrimp pool preserve. Figure 3.11-4 (Ephemeral Pools) shows the occupied pools have an area of 4.65 acres. Training could use the area between the pool complexes, but not through the pool complexes.</p> <p>History has recorded the steady decline of the San Diego Fairy Shrimp vernal pools. These pools have existed for thousands of years. The major decline started in the 1940 to 1950 time period because of World War II. Additional decline occurred between 1979 and 1986 from urban development. Before development there was approximately 28,500 acres of vernal pool habitat in San Diego County. By 1986, only 7% of those acres remained. On February 3, 1997 it was reported that 70% of the remaining vernal pools were on N.A.S. Miramar or Camp Pendleton. By 1995 95% of the vernal pools were destroyed. In 2001 it was reported that 2,400 vernal pools existed. Between 2002 and 2003 only 3% of the vernal pools remain. In 2002, under President George W. Bush, a federal judge invalidated the critical habitat for the San Diego Fairy Shrimp. In 2009 President Barack Obama went to the National Environmental Protection Agency and ordered that all the protections of the endangered species that had been dismantled during the Bush era be put back which reestablished the critical habitat for the San Diego Fairy Shrimp. So, the pools are down to 3% remaining. Most (70%) are on government property. Some of the pools do not have the San Diego Fairy Shrimp which makes the pools that do have, become</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, along a different path each time. The Navy agrees that cysts will be crushed and damaged in the dry season. However, there are tens of thousands if not millions of cysts, and the take of some during training on foot is not expected to be a population level effect. The 12 to 207 persons walking in a dispersed manner in the training area is not a large effect, considering the percent of the training area occupied by the pools. The nature and level of expected take have been addressed in a BA, and the Navy has completed consultation with USFWS (Biological Opinion signed July 7, 2010). The USFWS concluded that with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of ESA-listed species.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys.</p>

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		<p>more significant in importance. Development was the main cause of the decline in the pools. Now the Navy wants to develop S.S.T.C. - 5 which will further the decline of the pools if not protected as a fenced pool complex preserve.</p> <p>We are patriotic and want our service men and women to have the best training. They deserve nothing less. Detente, the easing of strained relations, also applies to nature. A constant vigil of good stewardship needs to be kept for the endangered species to get off of the federal list. Thank you for considering our comments on this important matter</p>	<p>In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
56.	Ed Degenhart	<p>I live just up the street from the helicopter base in Imperial Beach and have acclimated to the touch and go operations there for the past 20 years with no incidents or harm to the environment. I have no issue with the proposed increase in training and trust the US Navy to protect our environment and community's health and safety. I also respect the will of the Naval leadership to get their people the highest and best training for their call to service by our government. Anyone who is willing to risk their lives for our country has my total commitment and support to be properly trained to perform their duty.</p> <p>May God Bless our Servicemen and thank you for your service to our country</p>	<p>Your comment has been noted.</p>
57.	William Dick	<p>I have no problems with the Navy increasing the frequency of exercises on the Strand. My condominium is right above the SEAL compound and I have a direct view of activities to the south and west. I fully support all military activities on the Strand. I am never bothered by the military exercises and the Navy seems to be very responsible by minimizing noise when holding night activities. The Navy and the SEAL teams are part of my community and make living at Coronado Shores that much more exciting and enjoyable!! I love them.</p>	<p>Your comment has been noted.</p>
58.	Bill Dimmock	<p>Imperial Beach is a very quiet and peaceful community. We enjoy the quiet of the evenings and walks along the beach. We feel that this training facility has and will interrupt the peacefulness of our nights and our use of the beach. I understand the need for training, but feel that Imperial Beach is such a family area that training needs to be moved to a less populous area that would not limit the training times and days that are required to create the perfect military personnel. There must be balance and we have lived in, although not perfect, balance with the military for over 20 years. Extended training hours and area would not only affect the harmony we have achieved it would destroy the quality of family life in Imperial Beach. Please consider the option that allows us to continue as is.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS.</p> <p>The Navy considered time and location of training so as to minimize disturbances to the local community and does its best to conduct noise-producing activities during the day. However, to train in real-world scenarios that may occur, Navy personnel must train at night. Personnel need to train in these dark, late night conditions to ensure they are prepared for real-world operations.</p>

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59.	Cheryl Dimmock	<p>We bought our home in Imperial Beach over 20 years ago. Although we could have moved anywhere, we chose this special area to raise our children. We felt at that time that there was no where on earth that offered all the advantages that were offered here. We knew that IB had a questionable reputation and that we would be sharing our area with a strong military presence, but these were small prices to pay to live in such a diversified area. Not only culturally, but biologically. The mornings spent on the beach, watching the seals and porpoises. The afternoons spent over by the bay observing sea birds and turtles. The times we watched the military training were all special times of great education for my children. The best scenario would be for the Navy to find another location and allow the area to go back to a natural and untouched state. We need to protect all the environment from human encroachment and nowhere in the state do we have such a fragile area as we have been entrusted with here in Imperial Beach. Since, I know that this possibility is just a dream, please consider the option of keeping the training and land use as you have been doing and not extending the hours and amount of use here.</p> <p>There are schools and children and real people who need to continue with their lives, without having to be stressed over the noise, additional traffic, diminished access to the beach and the possibility that all the wildlife that is habituating and at this point thriving, will be affected by our careless use of what is an area of such living beauty. We need to consider other options. The decision to add additional training here would diminish our quality of life and what price is the Navy willing to pay for that.</p>	<p>The Navy strives to be a good neighbor and analyzed all training activities at SSTC with respect to applicable resources and regulations. The EIS analyzed a number of resources including land use and recreation (which addressed potential impacts to schools in the area), air quality, water resources, acoustic environment, socioeconomics, etc, air and water regulations.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>Additionally, the Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. In light of this proximity, the Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS.</p>
60.	William Dorr	<p>My concerns deal with the new use of Training Lanes 11 through 14, currently referred to by the Navy as SSTC-South. Let's be clear, until approx. 2 years ago, the Navy did not use this section for assault / beach access training or helicopter sorties. Now it's called SSTC-South? When did that happen? This half-moon shaped piece of land is bordered on one side by the ocean. The other side is surrounded literally by YMCA Camp Surf, which is attended by over 10,000 local children annually; Westview Elementary School, Imperial Beach; Over 500 private homeowners in Imperial beach; San Diego Bay National Wildlife Refuge; Coronado Cays, a residential community of 1200 homes, Silver Strand State Beach Park used by over 1 million people a year; Loewe's Coronado Hotel, which adds tremendously to the local economy and tax base and finally Camp Able, which serves Handicapped and challenged children and adults from throughout the southern CA area. SSTC-North and SSTC-South are separated on the ocean side of the strand by the CA Silver Strand State Beach Park.</p> <p>To have 2200 helicopter sorties and assault and beach access training, including the discharge of</p>	<p>As indicated in Chapter 2 of the FEIS and in Section 3.1.2.3, the increase in training activities is spread out over the whole of SSTC, rather than just at SSTC-S. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS and these are listed in Chapter 5.</p> <p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500</p>

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		<p>munitions will harm the area marked SSTC-South and have a very negative environmental impact on the surrounding community. If this is to be used for training, it should be very low impact and classroom type training. Confine the assault and sortie exercises to SSTC North, Lanes 1 to 10, where it has always been. The noise, pollutants, increased traffic and air quality will be harmed further in an area historically used for outdoor activities and wildlife sanctuary. The SSTC-South did not exist 2 years ago. That area has always been the antenna site. Nothing could have less of an impact on the area than an antenna site. To now convert it to overt and dangerous training and use the argument that the community should expect it is ridiculous. The helicopter traffic alone poses a huge potential for disaster to surrounding community sites that I just listed. The noise is well above what is has been historically. The Navy has let helicopters fly throughout the south bay area not heeding to the restricted flight corridors or following the agreed upon protocol. The ocean corridor is never used. To now triple the helicopter flights from 770 to 2200 a year and add the assault training at SSTC-South in the middle of residential locales, all less than 1/2 mile away is putting the public in danger unnecessarily. Continue to train in Lanes 1 to 10 and leave the antenna site, Lanes 11 to 14 for non-invasive, non-polluting activities.</p>	<p>helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations in the western portions of the boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>

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61.	Douglas Dribben	As a frequent tourist to Coronado, I especially enjoy seeing the Seals, the helicopters, and the ships offshore in exercises. This shows me where my defense tax dollars are going, and makes me proud to be an American. I salute the men of the Seal Teams and those men and women who support them, and encourage more exercises. The exercises do not damage the environment, and sharpen our defense capabilities. Do not think for one minute that they are not under observation by those who may be on the receiving end of the exercises one day, so they act as a wonderful deterrent to those who would do America harm. Please allow the Seals to expand their exercises as they desire.	Your comment has been noted.
62.	Beverley Dyer	<p>It was a shock on February 23rd to read in the San Diego Union of the Navy plans to increase the training along the Coronado coastline many times over the previous use. Even though I have lived in my home in Coronado Cays for over 30 years, never have we been contacted nor informed of this plan which has been studied for 10 years. Now we are allowed only two weeks to make any comment.</p> <p>Since there have been no public nor individual contacts previously made with the local population during your Environmental Impact study few, if any, of the local population were aware of these drastic changes. The noise of helicopters and other aircraft, besides leaving an oily residue are already a hindrance without your increasing it three-fold. Blasts of gunfire and detonation already awaken us, create a dangerous odor. You expect that humans and all living creatures will not be affected by an increase of 10 times?</p> <p>It was totally unethical and unprincipled for our government supported Navy to inhibit us from previous information. Why didn't the study include the many people who live on the Strand, the hotels, the many guests and tourists and campers who spend time in the area? Were the various organizations that sponsor beach activities informed and questioned? In which way was the human factor studied? We would like an answer.</p> <p>At the poorly attended Coronado meeting at the Coronado Recreation Center on February 25 it was obvious that few people knew anything about your plans even though Environmental Impact report had begun 10 years ago.</p> <p>Unfortunately, the public has only been given until March 9th to make comments concerning this issue. Is that fair?</p>	<p>The Navy has conducted numerous outreach events and briefs to local governments and special interest groups. Information was provided to your Association board regarding the EIS in late January 2010, timed with the public release of the DEIS. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30th. ,</p> <p>The Navy recognizes its proximity to adjacent communities and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation plans for activities that may cause an impact to the environment or surrounding area, and has presented these in the EIS.</p>
63.	Marilyn G. Field	<p>I am writing with comments on the Navy's proposed expansion of training activities on the Silver Strand:</p> <p>1) The Navy should not be increasing its operations on Coronado. Coronado is a small residential community which is already impacted by Navy traffic, noise and pollution. This has greatly increased with the nuclear aircraft carrier homeporting operations about 10 years ago. It is inappropriate to increase the burden on this small community when the Navy has other sites which might be used for training which do not burden any community Camp Pendleton springs to mind and there are other sites as well. It may not be quite as convenient but it is unfair to ruin a small community in the name of Navy convenience, not necessity.</p>	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the

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			EIS to illustrate why alternate locations are not feasible.
64.	Marilyn G. Field	2) NEPA requires that all impacts related to a proposed course of action be analyzed in the EIS. However, the Navy has deferred analysis of the impacts from helicopter trips to and from the training areas. I believe this violates NEPA.	<p>This FEIS analyzes training that would occur in the training areas of the SSTC. Additional information on aircraft overflights and a description of their flight paths that are not associated with SSTC training activities are now presented in Chapter 2, Section 3.6 and Section 4.3.6.</p> <p>Helicopter activity discussion has been added to Cumulative; Section 4.3.6. The Section discusses the various squadrons based out of NASNI and the number of helicopter flights that these squadrons generate. The Navy AICUZ study is currently being updated to identify all flights generated from NASNI and NOLF.</p>
65.	Marilyn G. Field	<p>3) Helicopter sorties will increase by about 300%. If helicopters and fixed wing aircraft take off from North Island and transit to the training sites on the Silver Strand they should be required to fly over the ocean at a sufficient distance from land so as not to disturb residents on the ocean side of Coronado. No aircraft should be permitted to fly to or from the training areas over the Bay. Residents along the Bay are already impacted by Navy helicopter noise. The Bay is so narrow that it is not possible for aircraft to fly far enough away from residences to eliminate or minimize noise.</p> <p>4) The EIS describes the following activities: triple the helicopter sorties, new (presumably larger) helicopters and amphibious craft, pyrotechnics, pile driving, nighttime helicopter hovering for 1- 2 hours, 50% increase in training incidences, almost tenfold increase in firearm firings and admits there may be sleep disturbances and communications disruptions. Yet the EIS concludes that there will not be significant noise increase because the training is dispersed over a larger area. On this basis, no mitigation is proposed. It is not credible that these activities will not cause significant noise increases to the residents of adjacent areas. These disturbances cannot be mitigated and therefore should not be permitted.</p>	<p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations in the western portions of the boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific</p>

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			<p>Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p> <p>Helicopter noise is addressed in Sections 3.6.2.2.1 and 3.6.2.3.2 of the FEIS. The analysis of helicopter sound indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. Because of the logarithmic nature of sound; a doubling of sound energy results in only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p>
66.	Marilyn G. Field	5) The EIS notes that berms will be built in places along the Strand. This will effectively wall off the view of the ocean which residents and tourists enjoy.	As listed in Table 2-1, the berms will be built in support of ROWPU training, which is located close to the shoreline and has a relatively small footprint. There are no other manmade dunes on Navy training lanes.

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67.	Marilyn G. Field	6) The new and expanded training activities and the construction activities noted (including retail, recreational, housing and restaurant facilities) will increase traffic which is already greatly overburdening Coronado. There is no good solution to mitigate traffic and the Navy has been unwilling to contemplate any solutions which would significantly reduce the Navy's traffic. No activities which increase Coronado traffic should be permitted. Respectfully submitted,	SSTC EIS adequately addresses impacts to traffic based on increased training activities. There are no construction projects associated with this Proposed Action. The Average Daily Traffic (ADT) of Coronado roads was discussed in Table 3.14-2. The ADT of all public roads was calculated for all traffic, which would include any military traffic. The EIS analyzed the Level of Service (LOS) of local roads to determine the contribution to overall traffic on public roads from military activities. Based on the analysis, increases in military training vehicle trips per day would represent less than two percent of the total daily traffic, and the local road network would experience an acceptable LOS, except for intersections at Gates 1 and 2; those intersections would experience an unacceptable LOS. However, traffic generated under Alternatives 1 and 2 represent less than one percent of the morning volume and less than two percent of the evening traffic at these intersections, and this increased LOS would be well within the capacities of the existing regional roadway network.
68.	Marilyn Field	The Navy should not be increasing its operations on Coronado: Coronado is a small residential community which is already being severely impacted by the Navy's operations. Coronado and the Navy share this small island but the Navy's increase in operations over the past 10-15 years has created noise, increased traffic and air pollution. It is inappropriate to increase the burden on this small community - in essence ruin with further increases in noise, traffic, air pollution and adverse visual impacts when the Navy has other options for training which would not burden any community- Camp Pendleton springs to mind. It may not be as convenient but it is unfair to ruin a small community in the name of Navy convenience.	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.
69.	William S. Field	Helicopter noise on San Diego bay is already a major annoyance, especially during the summer. The ramp up in training on the Silver Strand will increase historically helicopter flights (up to 3x I'm told), including flights from new helicopters to be stationed at North Island. We live on the Bay in Coronado (Coronado Point). Any significant increase in helicopter traffic over the Bay will make living there intolerable. In part, this is heavy use. Navy pilots fly at less than 500 feet most of the time, and even at higher elevations the noise is a nuisance. At the meeting I was told that the helicopter traffic patterns are not included in the EIS. This appears to be a violation of NEPA, which requires the total impacts of any project be included in	As proposed under Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives

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		<p>an EIS.</p>	<p>1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p> <p>A discussion of helicopter activity has been added to Cumulative, Section 4.3.6 of the FEIS. The Section discusses the various squadrons based out of NASNI and the number of helicopter flights that these squadrons generate. The Navy AICUZ study is being updated to identify all flights generated from NASNI and NOLF.</p>

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70.	Gregory Fischer	As a resident of Imperial Beach for 18 years, I have a few comments. The east view from my residence on Seacoast Drive looks down the center line of the Navy's OLF runway approximately 1/2 mile away. There are helicopters conducting flight operations on most days. The noise is not at all a problem. What I hear is the sound of freedom. I truly want these pilots and air crew to be as proficient as possible in defense of our country. As for the Silver Strand Training Complex, I want our Navy SEALs to conduct as much training as they need, no matter the noise in the proximity of their base along the Silver Strand, recognizing their importance and vital mission for our defense. No bird, fish, ground cover or sensitive ear should have a higher priority over the vital training of our Navy SEALs. Thank you for the opportunity to comment.	Your comment has been noted.
71.	Vincent J. Flynn, M.D.	This is in regard to the Silver Strand Training Area the navy proposes, to expand. I am a native of Coronado and have watched the navy's activities all my life in and around the Silver Strand. For the most part, they have taken good care of the natural resources in the area and I have no complaints. But I must object to the increased activity in and around the old Fort Emory, the area just north of Imperial Beach. Much has changed since WWII when that area was so very important to national security. It has been repopulated with the wild species that were there 100 years ago, they have reclaimed it for their own. In my opinion, it would do much harm to the environment to reclaim this area for navy purposes. The navy should leave it alone and allow the public access to the beach area. There is still a lot of beach area available to the navy at North Island and Camp Pendleton. Give the citizens a break and do not extend your already large claim on the small area of Coronado.	The Navy strives to be a good neighbor, and analyzed all training activities at SSTC with respect to biological resources. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is provided in the FEIS to illustrate why alternate locations are not feasible. Additionally, the Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation plans for activities that may cause an impact to the environment or surrounding area, and has presented these mitigation plans in Chapter 5 of the FEIS.
72.	Jeffrey G. Foster	The projected increase in activities, 48% increase in sound-generating activities, could cause a noticeable difference in the peacefulness of north I.B. Please choose the no action alternative and maintain current level of activities. I.B. residents should be considered first and foremost in making this decision as we will be the most impacted. beach access and the bird life along the Silver Strand are also coveted and are part of what make this a special place. Please leave the current situation as is. Choose the no action alternative and do the extra training elsewhere where the public will not be as impacted.	The projected increase in activities at SSTC-S would not translate into a general 48-percent increase in sound exposure of Imperial Beach residents. While helicopter sorties, shotgun breacher training, and amphibious landing exercises on SSTC-S all would increase, they also would occur in various locations at different points in time. The distribution of these activities over time and space is such that the change in the sound environment for any individual resident cannot be quantified. The commenter's preference for the No Action

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			Alternative is noted.
73.	Frank Gaines	The need has long been established as has the wise stewardship of our military on the lands needed. I totally support the request and the uses identified.	Your comment has been noted
74.	Gerd Geissler	<p>Having lived in Imperial Beach next to the Naval Antennae for over 40 years we are familiar with Naval Warfare training (which has only increased in recent years). We have not complained one bit about the noise at night (bomb blasts and machine gun fire) nor the increased helicopter traffic OVER our houses. Now you are telling us we will not only have this noise continue but it will be for longer hours and be even more disruptive to our once quiet neighborhood? The helicopter take offs and landings echo off the walls as it is and you want to do hundreds more? We are living in this community and we respect the Navy but feel that they do not respect us back. We deserve peace and quiet. The noise concerns we have are real and I don't think any of you would want to relocate your beautiful home to right across from a loud, disruptive training facility so why are you making us do that? You already take half the Strand for your training--leave us to our peaceful part down in Imperial Beach.</p>	<p>As proposed under Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of the boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as</p>

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			<p>well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>
75.	Gerd Geissler	<p>We are on Silver Strand and Carnation. The traffic goes directly in front of our lot. We are concerned about excessive speed and traffic backing up along Silver Strand. We would like to recommend that the northerly gate be used for access into the base. We would also recommend considering a light at Silver Strand and Palm Ave. Speed limit needs to be posted. Also concerned about noise levels after 10 pm.</p>	<p>The Navy is responsible for traffic on its controlled land. Once personnel leave SSTC-S, they are subject to Department of Transportation regulations. Speed and traffic control measures are the responsibility of the City of Imperial Beach. Please note that due to this and similar comments, the Navy is considering increasing signage or providing a message board requesting Navy personnel to obey all posted speed limits, keep radios turned down, etc., as personnel leave the base, as the Navy currently does at Naval Base Coronado, Naval Amphibious Base – Coronado, and Naval Base San Diego.</p> <p>Please note that due to your comment and other similar comments, the Navy is assessing the feasibility of using the north SSTC-S gate for ingress/egress. Such use would depend on many factors, such as CALTRANS signal/signage changes and the City of Coronado authorization of the new access point.</p> <p>Your concern about noise from nighttime training activities is noted. Traffic noise along Silver Strand from late night training activities would be minimal and infrequent, as few training activities take place on SSTC-S, and those that do typically involve small groups. Night training is an essential element of the Navy's training program at SSTC because many military activities, such as clandestine operations, are conducted at night and military personnel must train under realistic conditions. Noise from nighttime training activities at SSTC is addressed in Sections 3.6.2.2.6 and 3.6.2.3.7 of the EIS. As listed in NBCINST 3502-1, the Navy notifies local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the</p>

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			Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.
76.	Lilo Geissler	We live along Silver Strand Boulevard and have had to contend with traffic going in and out of the Naval base at all hours. The people who are driving take no heed to the fact that this is a residential area and should be driven at under 25 mph. They speed out of the base at about 40-50 mph putting children and pets at risk. Now you say you want to increase training which would in turn increase the number of cars using Silver Strand Blvd. as their route? Why should we have to put up with the dangerous conditions these cars pose? Why do we have to fear an accident will occur when these hazardous drivers are speeding along our neighborhood roads? We do not want the heavy traffic congestion along our peaceful street and we do not want the added pollution associated with so many extra cars. Why not open the gate along the Silver Strand (after the berm) and make that available if you are to continue with more training exercises? Our neighborhood was not built to be a thoroughfare for large amounts of cars and we don't like the dangers they would bring.	The Navy has reviewed applicable traffic studies and has presented their results in the Section 3.14.1.2 of the EIS. While there is an abundance of traffic along the Silver Strand/Highway 75, it should be noted that the comment being referenced only accounts for traffic that is associated with the training activities at SSTC. The impact of that traffic (only associated with the SSTC training activities) relative to the overall traffic on area roads is presented in the resource section of the EIS as well as the cumulative section of the EIS. Currently, intersections and roadways within the ROI typically experience an acceptable LOS. Although the intersections at Gates 1 and 2 experience unacceptable LOS, traffic related to the Proposed Action represents less than 1 percent of the morning volume and less than 2 percent of the evening traffic at these intersections.

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77.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	<p>We are writing to express our serious concern and opposition to the Navy’s planned expansion of military exercises on The Strand. There are several reasons for our opposition: human health, environmental concerns, impact on residential atmosphere, and impact on the local economy. Our family is proud of the Navy and strongly supportive and proud of our military, and we understand the need for expanded military training. The eldest son in a Coronado family with whom we are very close is currently in the Navy Seal training program, and so we have an additional personal connection with the need for the best training possible. Over the past few years, the level of military exercises in Coronado has been increasing in both frequency and intensity. It is plainly audible from our home on Glorietta Blvd. Thus, we have been patient with the expanded use of these training areas, but now feel that the noise levels we currently experience are near the tolerable limit. We feel strongly that the place to expand such operations, however, is not Coronado, but the Navy’s more isolated sites at Camp Pendleton and at the offshore islands. The noise we experience at our home, however, is not the only reason for our concern. There are many more:</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS. The EIS addressed socioeconomics and beneficial impacts associated with the Navy’s Proposed Action. Existing regional population and associated housing impacts, employment rates, and regional economy would remain unchanged.</p> <p>The Navy considered time and location of training so as to minimize disturbances to the local community and does its best to conduct noise-producing activities during the day. However, to train in real-world scenarios that may occur overseas, Navy personnel must train at night. Personnel need to train in these dark, late night conditions to ensure they are prepared for real-world operations. All potential impacts related to noise are addressed in the Acoustic Section; Section 3.6.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>
78.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	<p>Human health – One of the principal consequences of expanded war exercises on The Strand would be noise pollution, which is well documented to cause hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and harmful emotional effects. The radius affected by this noise pollution extends well beyond the area immediately adjacent to the site, given the magnitude of the noise and the efficiency with which sound travels over water, thus exposing the entire southern half of Coronado.</p>	<p>The acoustic analysis presented in the FEIS describes the real-time effects of the various types of training sound on exposed individuals, such as speech interference and sleep disturbance, that can result in annoyance and stress. The FEIS acknowledges that such effects would occur occasionally, but</p>

#	Name or Organization	Comment	Response
			<p>concludes that the incremental effects of sound from the proposed training activities at SSTC would not have a substantial effect on the acoustic environment.</p> <p>Hearing loss may occur where individuals are exposed to a sustained noise level of 85 dB or above. The training activities at SSTC do not result in sustained sound levels of this intensity in off-installation areas. Therefore, tinnitus and hearing loss would not occur as a result and are not a concern for SSTC training activities.</p> <p>Emotional reactions to noise are not related to the intensity of the sound, generally are based on the life experiences or expectations of the receptor, and may be influenced by several factors other than noise. Environmental noise metrics and community noise standards thus do not provide a basis for assessing such effects. The relationship between noise and such conditions is thus unpredictable, although the Navy acknowledges that a substantial increase in the frequency of impulsive noise events is likely to result in some increase in such reactions in the community.</p>
79.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	<p>Another major effect would be air and water borne pollutants, toxic debris, and shoreline contamination from toxic chemicals that are carried in or produced by exploded ordinance. These include toxins and carcinogens such as depleted uranium, mercury, and lead, as well as irritants and irritant producers such as titanium tetrachloride, red and white phosphorus. This is to name just a few of the ordinance-associated chemicals known to be harmful to humans. Loss of residential atmosphere – We have just spent several years instituting a new revision of zoning requirements based on the widespread sentiment that Coronado residents wanted to preserve their village atmosphere. Nothing will destroy that atmosphere more quickly or thoroughly than the frequent and continual sounds and smells of war exercises. Our troops are crucial to our safety and we support them, their training, and their families. Many of them and their families also live here in Coronado. Proper support requires that we provide appropriate separation between domestic living arrangements and war simulations. This is especially relevant given the widespread occurrence of PTSD and related disorders in returning service personnel.</p>	<p>Toxic debris and shoreline contamination are addressed in Section 3.4 (Hazardous Materials and Waste) and Section 3.5 (Water Quality) in the EIS. Depleted uranium is not used in training at SSTC.</p> <p>A full analysis of air quality has been performed and the results are presented in Section 3.3 as well as Appendix C of the FEIS.</p>

#	Name or Organization	Comment	Response
80.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	<p>Ecological impact – The Navy’s own Environmental Impact Statement acknowledges that there will be a significant impact on marine ecology, including bioaccumulation of chemicals in the food chain, death from exposure to toxic chemicals and bomb blasts. In addition to direct physical harm, there is also the impact of noise on animal life in the reduction of usable habitat, which in the case of endangered species hastens the path towards extinction. The Navy’s training use of sonar has already increased the deleterious exposure of marine mammals, and this expansion will further increase the burden of noise pollution on them.</p>	<p>The EIS analyses disturbance to habitat and direct impacts to fish and other marine animals. Habitat impact has been determined to be minimal, and mitigation measures decrease the possibility of impact to marine mammals.</p> <p>Regarding ecological impacts: all alternatives avoid effects on marine algae, plants, and invertebrates in areas where densities of these organisms are the greatest: the salt marsh, mudflats, and salt pond. On the beach, vehicle use, boat landings, helicopter landings, and foot traffic associated with a range of activities could cause temporary localized disturbances of infaunal invertebrates of the sand.</p> <p>Minimal disturbance of sandy bottom habitat and increased turbidity from amphibious landings and underwater demolitions.</p> <p>A total of 1.13 acres of eelgrass habitat may be impacted in the designated training lane within the Bravo training area. Management practices are in place for jurisdictional waters and special aquatic sites. This includes the Navy Eelgrass Mitigation Bank management practice within San Diego Bay. This is consistent with the Southern California Eelgrass Mitigation Policy.</p> <p>Adverse modifications to benthic habitat resulting in effects to EFH occur on limited bases during amphibious landing and beach construction activities within the Bravo training area.</p>

#	Name or Organization	Comment	Response
81.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	Local Economy – The Hotel Del is Coronado’s major tourist destination, and it sits adjacent to the area where these exercises would be increased. The noise and smell from these activities would effectively ruin anyone’s stay at the hotel, or at any of the nearby hotels. The repercussions for Coronado’s standing as one of America’s most desirable tourist and vacation destinations would be rapid and detrimental, and this would be felt as a permanent blow to the local economy and tax base.	The Socioeconomic section addresses any anticipated impact in the area of southwestern San Diego County, surrounding SSTC. As listed in Section 3.15.2.3.1, existing regional population and associated housing impacts, employment rates, and regional economy would remain unchanged. This includes the hotel, tourism, and restaurant commerce in southwestern San Diego County.
82.	Dani S. Grady and Ralph J. Greenspan, Ph.D.	In short, we feel strongly that the proposed increase of Navy exercises on The Strand would be certain to have severe and long-term detrimental effects on the quality of life in Coronado, lasting well beyond the period of time in which the exercises actually occur. For this reason, we urge the City Council and Mayor to take a strong stand against such expansion of activities.	Your comment has been noted
83.	Ralph Greenspan	<p>My wife and I are writing to express our serious concern and opposition to the Navy's expansion of military exercises in Coronado. Our reasons include: human health, environmental concerns, impact on residential atmosphere, and impact on the local economy.</p> <p>Our family is proud of the Navy and strongly supportive of our military, and we understand the need for expanded military training. Over the past few years, the level of war training exercises in Coronado has been increasing in both frequency and intensity. It is plainly audible from our home on Glorietta Blvd. We have been understanding of it up to now, but the noise levels we are experiencing currently are near the tolerable limit. We feel strongly that the place to expand such operations, however, is not Coronado, but the Navy's more isolated sites.</p> <p>The noise at our home is not the only concern:</p> <p>Human health -- One of the principal consequences of expanded war exercises in Coronado is noise pollution, which is well documented to cause hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and harmful emotional effects. The radius affected by this noise pollution extends well beyond the area immediately adjacent to the site. Given the magnitude of the noise and the efficiency with which sound travels over water, this exposes the entire southern half of Coronado.</p> <p>Another major effect is air and water borne pollutants, toxic debris, and shoreline contamination</p>	<p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>The EIS does analyze noise and its effect on wildlife (See Sections 3.11.2 Terrestrial Biological Resources Environmental Consequences; 3.12.2.2.1 Air Activities; 3.12.2.2.2 Pyrotechnics, Simunitions, and Blanks; 3.12.2.2.4</p>

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		<p>from toxic chemicals that are carried in or produced by exploded ordinance. These include toxins and carcinogens such as depleted uranium, mercury, and lead, as well as irritants and irritant produces such as titanium tetrachloride, red and white phosphorus. This is to name just a few of the associated chemicals known to be harmful to humans.</p> <p>Loss of residential atmosphere -- Our troops are crucial to our safety and we support them, their training, and their families. Many of them and their families also live here in Coronado. Proper support requires that we provide appropriate separation between domestic living arrangements and war simulations. This is especially relevant given the widespread occurrence of PTSD and related disorders in returning service personnel.</p> <p>Environmental impact -- The Navy's own EIS acknowledges that there will be a significance impact on marine ecology, including bioaccumulation of chemicals in the food chain, death from exposure to toxic chemicals and bomb blasts. In addition to direct physical harm, there is also the impact of noise on animal life in the reduction of usable habitat, which in the case of endangered species hastens the extinction process. The Navy's training use of sonar has already increased the deleterious exposure of marine mammals, and this expansion will further increase the burden of noise pollution on them.</p> <p>Local economy -- The Hotel Del Coronado is Coronado's major tourist destination, and it sits adjacent to the area where exercises are increasing. The noise and smell from these activities would effectively degrade anyone's experience of staying in Coronado. The repercussion for Coronado's standing as one of America's most desirable tourist and vacation destinations would be rapid and detrimental, and this would be felt as a permanent blow to the local economy and tax base.</p> <p>In short, we strongly feel that the the proposed increase of Navy exercises in Coronado would be certain to have serious and long term detrimental effects on the quality of life in Coronado, lasting well beyond the period of time in which the exercises actually occur. For this reason, we take a strong stand against such expansion.</p>	<p>Amphibious and Beach Activities; and parallel sections under the other Alternatives). Section 3.11.2 discusses the noise impacts on wildlife from current activities and from a proposed increase in these activities. The level of noise generated by these activities is not quantifiable above current background noise, including ocean surf, highway traffic, human-generated noise from surrounding neighborhoods, and current military flight patterns over the SSTC. Wildlife in the area has likely habituated to these noise patterns and, combined with the small area of impact compared to the larger area of available habitat, any noise-generated impacts would occur on a short-term and individual basis with no expected detriment to long-term population levels.</p> <p>The noise analysis in the FEIS estimated sound levels along Silver Strand from various training activities, and determined that the intensity, frequency, and duration of these events were not sufficient to have substantial effects on human health. The FEIS also evaluated the potential effects of toxic substances from expended training materials and effects on water quality.</p> <p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. In this manner, the Navy is adding additional mitigation measures for alerting the adjacent communities regarding events which may be considered intrusive.</p> <p>The EIS addressed socioeconomics and potential impacts associated with the Navy's Proposed Action. The Navy has been conducting training activities on the Silver Strand for 60 years; the areas of activity are shown in Figure 1.2. These areas will not change with implementation of the Proposed Action and as listed in Section 3.15.2.3.1, the increase of activities in these areas will not be appreciable by tourists or the local economy because the Navy is an integral part of the</p>

#	Name or Organization	Comment	Response
			Silver Strand. The activity increases in these areas will not have a considerable effect on the local economy and tourism industry.
84.	Reiko Gregory	As a native San Diegan of over 50 years and one who has enjoyed the serenity of Silver Strand from Coronado to Imperial Beach for many years, especially as a natural habitat for many birds and other animal species, I am appalled that the Navy is requesting to expand its activities there. I call on all those in power to keep the Navy activities out of these areas. Save our natural habitat, save the Strand. We don't need more military buildup. We need to preserve our peaceful natural habitats and our beautiful environmental surroundings.	The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area and habitats. As indicated in Sections 3.11 and 3.12 of the FEIS, the Navy has developed and will continue active management of the biological resources of the base. The Navy has developed mitigation measures for activities that may cause an impact to the environment or surrounding area and has presented these in Chapter 5 of the FEIS.
85.	Steven Gregory	As a San Diego resident for more than 30 years, I have enjoyed Silver Strand and the peace that it offers. Increasing military activity in this location would be harmful both from an environmental standpoint and aesthetic standpoint. Silver Strand is not only a resource for San Diego residents, but for tourists as well. And while the EIS does address the impact the increased military activities would have on terrestrial animals, the full impact is never certain, and the impact on aquatic flora and fauna is unknown and therefore a "risk" that should not be taken. I fully understand the need for training, but not at the expense of the environment and people. The military would be better served increasing moral, cultural, and ethical training, which would create a more enlightened military, rather than one that knows how to kill. I call on the people in charge to not increase military activity in this area. Our dwindling resources do not need to come under attack from our own military.	While the full impact of the military activities may not be entirely certain, the Navy has attempted to quantify, by using the best available science, the amount of impact that these activities would have. Sections 3.7 through 3.10 of the EIS discuss and analyze these impacts and any mitigation thereof.
86.	Robert Hrodey	Having visited the Coronado area several times over the years, we always enjoy the presence of the military and their training in the area. It reminds us of where we are, how we got there and what it takes to remain free to travel about. If the folks upset with additional training of our armed forces to allow them to better perform their duties, let THEM (the protesters) take up arms and put it on the line for us. That should settle the debate!	Your comment has been noted.

#	Name or Organization	Comment	Response
87.	Carol Humphrey	As a resident of Coronado, I am writing to express my support for the Navy exercises as I am profoundly grateful for all the military does.	Your comment has been noted.
88.	John Hunter	I write because I am tired of others speaking for me. I have lived about 55 feet from the base since the summer of 2002. The base has never been a problem. The problems in the neighborhood are not related to the base. Please contact me if you wish to discuss what I feel are ethics violations regarding complaints to your expansion. Go for it!	Your comment has been noted.
89.	Miriam Iosupovici	Choosing to do this in one of the most beautiful beach environments in the US, close to major population centers that need a peaceful resource, seems a poor choice.	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible. Additionally, the Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area.
90.	Miriam Iosupovici	We already have problems with pollution in this area. What will the effect be on the military if they contract illnesses during training? What will increased pollution effects be from training vessels?	The effects of the Proposed Action, including the effects of training vessels on air quality as well as ocean and bay water quality, are addressed in Section 3.3 and 3.5 of the FEIS, respectively. Because the purpose of the EIS is to address the effects of the Proposed Action on the public and the environment, rather than on itself, the effects of ocean water quality on military trainees are not addressed in the FEIS. The Navy takes the health and fitness of its personnel seriously, however, and closely monitors the conditions under which training activities are conducted.

#	Name or Organization	Comment	Response
91.	Miriam Iosupovici	<p>I simply don't trust that the noise levels will NOT be intolerable at the increased level proposed. I don't want to hear the echo of bombardment PERIOD. What ab the fact that we have many vets living here. Will there be increased PTSD responses to the sounds? Nothing I have read discusses this potential issue, one I am aware of as a mental health professional.</p> <p>Helicopter overflight noise already impacts my environment at present levels. Increases predicted will be intrusive. We have no idea what the impact will be on birds utilizing the Tijuana Estuary, part of the Pacific Flyway, despite the EIS document's assertions.</p>	<p>The Proposed Action does not include bombardments. Other types of military training sounds (e.g., small arms fire) could be audible in nearby portions of Imperial Beach. While impulsive noise events clearly play a role in post-traumatic stress disorder incidents, so do a variety of other factors. Given the number of variables involved, it is not possible to describe the relationship of SSTC training activities, if any, to post-traumatic stress disorder incidents in Imperial Beach.</p> <p>Helicopter overflights of Imperial Beach and the Tijuana Estuary consist of pilots transiting from NASNI to NOLF, or performing touch-and-go's at NOLF, for training activities unrelated to the SSTC training activities addressed in the FEIS. Helicopter flights in support of SSTC training activities depart from NASNI, transit over water to the north of Imperial Beach, and approach and depart from the training beaches with as little overflight of land areas as possible.</p>
92.	Miriam Iosupovici	<p>The Pacific Flyway is under this area. Over 350 species of birds may be impacted, assertions to the contrary that they would not be. Imperial Beach has a difficult economic situation and visitation to this area due to bird life is one of the few income generating parts of our economy. Why would birdwatchers choose to come to an area where they are forced to watch birds with an incessant sound of helicopters, even assuming this wouldn't alter migration patterns (an assumption that strains credulity)</p> <p>The Silver Strand plan to increase training will inevitably negatively impact the nesting and fledgling of Least Terns due to increased foot and vehicle traffic. This Least Tern project has been successful until now. Why should we believe this EIS will be enforced after it is approved?</p>	<p>The most important shorebird areas are avoided (salt marsh, mudflats, salt pond), and many minimization measures are implemented in compliance with Migratory Bird Treaty Act and Endangered Species Act. Salt marsh, salt pond, and mudflats are nearly completely avoided. Impact to birds is expected at low levels, but site improvements are also planned where birds can be protected. With regards to nesting terns/plovers, the Navy is required under the Endangered Species Act to implement the terms and conditions of the final Biological Opinion. Also, the Navy will be required under the Biological Opinion to re-initiate consultation with USFWS if the populations of terns or plovers at Naval Base Coronado decline below current baseline nesting levels. Please see the analysis of impacts to Migratory Birds in Section 3.12. The Navy is committed to work with the Port to fund surveys for waterfowl and shorebirds throughout San Diego Bay every 3 years. Baywide surveys follow consistent protocol and will be used to document future changes in bird abundance, diversity, and use of the Bay. Section 3.12.1.2 summarizes over 500,000</p>

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			<p>observations of San Diego Bay birds by species, location, abundance, diversity, and bird group.</p>
93.	Rina Kelley	<p>On the occasion of the meeting this date on your proposed expansion of activities at your SSTC Complexes and associated EIS I want to take the opportunity to inform you about your lack of attention and dangerous disregard of your property in Imperial Bch which has created a dangerous condition for years.</p> <p>Your misuse of the word "Stewardship" in your EIS to expand training activity in your SSTC may serve the Fairy Shrimp and Snowy Plover well, but your neglect for the welfare of the inhabitants of my City who have been subjected to your dangerous threatening activity for years is deplorable.</p> <p>You are hereby put on notice that first, your steel Seawall outside of the Camp surf fence at the Beach has huge holes and serves no purpose except to attract children and has become a serious hazard to the safety and welfare of all of us. Its jagged rusted steel rim and bottom are hazardous and constitute a daily accident-waiting-to-happen for the numerous children who climb upon it both within and without the confines of Camp Surf. Since these children have little supervision anyway, you must take control and remediate this problem. This rusty steel nuisance has fallen in such disrepair that it has not served a purpose for at least ten years, and I fear for my own as well as the safety of others whenever I approach it to get down to the beach area. Would you have us wait another ten years for you to remediate and remove it. Hopefully not, now that you are formally on notice with Legal effect.</p>	<p>The Navy is now aware of your concern about condition of Camp Surf fence. This FEIS is intended to analyze the training activities occurring at SSTC and does not address the condition of preexisting structures. However, NBC Planning prepared a planning document (DD Form 1391), dated 28 May 2009, for FY 2010 Special Projects Program for repair seawall near Camp Surf</p>
94.	Rina Kelley	<p>Your personnel--police and others entering the camp at Antenna Station (SSTC South) often speed down Carnation avenue when your personnel should instead be using Silver Strand St in mornings which goes directly to their station. Please post signs on your side of Carnation, the North side, with warnings to slow down as numerous children and people frequent that area to the corner going to and from the Beach.</p>	<p>Navy is responsible for traffic on their controlled land. Once personnel leave the base, they are subject to Department of Transportation regulations. Various speed and traffic control measures would be the responsibility of the City of Imperial Beach. Additionally, due to your comment and other similar comments, the Navy is considering implementing increased signage or message board requesting Navy personnel to obey all posted speed limits, keep radios turned down, etc., as personnel leave the base.</p>

#	Name or Organization	Comment	Response
95.	Rina Kelley	<p>I feel like I live in a War Zone in summer when SEALs shoot guns and explode munitions within SSTC South East. Could you please put a time limit on this activity so I can sleep at night and provide a schedule of upcoming events so I can leave town. Also, your planes from NASNI fly late overhead doing exercises in violation of agreements you have made with our Congressional and Civic leaders. Please don't allow this activity to continue past 9PM and afford us a timetable so I can leave town with my animals and children. Your YMCA Camp is a nuisance, continuing to play loud music and solicit screaming and yelling well past the 9PM agreed-upon time. Please have this activity cease. (Read the Police Report on your Camp Director, Mr Thompson who assaulted my friend a Navy SEAL's wife next door when she went over to tell him to turn down the music and was 8 months pregnant and later lost her baby). I feel forced to sell my home which I must further depreciate by declaring in Real Estate papers that I live in a War Zone due to the above activity which threatens and annoys constantly in Summer months. A former Air Force Officer, I cannot begin to understand how the Navy can be allowed to perpetrate such damage on a Community when my fellow Air Force personnel would never have dared. Why don't you go to Corregador or the Phillipines where you can conduct your endless and mindless training missions. General MacArthur drove out the Japanese over there so they can't hurt you anymore- Unless you drive a Toyota. Or better still, Puerto Rico where the Air Force goes, or Haiti. In short I protest this EIS which, in the aggregate, continues to wreak more havoc on my Community. And I have no doubt that in a few years, with the proverbial Camel's Nose already in the door, you will be sending invitations to a like event.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Additionally, due to your comment and other similar comments, Navy is investigating additional means of alerting the adjacent communities regarding events which may be considered intrusive as well as posting signage and controls regarding public access to the beaches.</p> <p>No fixed-wing aircraft are included in the Proposed Action. The helicopters associated with training operations at SSTC-S do not overfly Imperial Beach. The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic</p>

#	Name or Organization	Comment	Response
			<p>Environment) of the SSTC FEIS.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>
96.	Ann S. Kennedy and General Edward Baumer	<p>I have learned that the Department of the Navy is planning on increasing the levels of training at the Silver Strand Training Center. I hope that you can provide the level of quiet enjoyment that I have experienced for the last 8 years as I am a full time resident.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. The Navy has developed mitigation plans for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS.</p>
97.	Celeste Kennedy	<p>I am opposed to the increase in Naval Training Exercises at the Silver Strand Complex Naval Training Area. We are long time residents and homeowners in Coronado and we have witnessed the increase in traffic, noise, and pollution of this gem of a town which has the U.S. Navy as its neighbor.</p> <p>While not all negative environmental impacts are attributable to the Navy, the fact is that many of them are, and when you combine them with the already overwhelming levels of noise, traffic, air and water pollution, it makes no sense to increase it all by ramping up Navy Training Exercises on the Strand.</p> <p>Helicopter flights down the bay are very noisy and bothersome. The exhaust which we can see coming out of those machines is certainly unhealthy. Increasing their activity is unacceptable. The gunfire we hear with the war games and training is a frightening and bothersome sound for civilians such as ourselves. Please do not increase the amount of gunfire we must hear. I imagine the amphibious craft are gross polluters of the sea as well.</p> <p>While it is admirable that the Navy has participated in the Least Tern preservation efforts, we would like to see efforts towards preservation of clean air, water, and peace and quiet as well. Coronado has grown over the years and has become densely populated with the addition of the Coronado Shores and Cays residential projects. All areas of Coronado, as well as all areas of the southern San Diego bay and coast, are affected by Naval training exercises.</p>	<p>The Navy strives to be a good neighbor and analyzed all training activities at SSTC with respect to applicable air and water regulations. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>

#	Name or Organization	Comment	Response
		<p>Please do not increase any of it, as we are already enduring way too much. Perhaps consider Camp Pendleton as a spot to increase the training exercises. It provides a vast coast and inland area which affects far fewer civilian residents.</p>	
98.	Gary Klopp	<p>As a SBC and active duty member of NSW since 2000, I feel the need to convey some of my concerns. I do sympathize with the balancing act of training our warriors economically, efficiently, and to the standard that our country and NSW warriors require and deserve. I fully understand that our countries security is at stake; however, the amount of training and location of that training must be balanced with the surrounding communities and environment.</p> <p>Many studies have proven that people who live near airports have a much higher than national average of cancer due to all the exhaust and fuel that is released into the air. Under the proposed plans, helo flight hours would increase dramatically certainly affecting the air quality surrounding Imperial Beach and outlying areas.</p> <p>Camp Pendleton offers large training areas to include military air space, small and heavy weapon ranges, beach access for amphibious operations, ammunition storage, helo landing sites, and various supporting facilities and infrastructure. This area is much larger than the limited area on the strand and there is much more open acreage between San Diego and San Clemente. Although not as convenient to NAB Coronado or the Advanced Training Center, it is close and would meet the "balancing act" that I stated earlier. The impact at Camp Pendleton would be much less felt than here on the strand.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>Additionally, the Navy has analyzed the emissions from helicopter flights associated with training activities at SSTC in the EIS and has found the emissions do not exceed current regulatory limits</p>
99.	Gary Klopp	<p>As a SBC and active duty member of NSW since 2000, I feel the need to convey some of my concerns. I do sympathize with the balancing act of training our warriors economically, efficiently, and to the standard that our country and NSW warriors require and rightfully deserve. I fully understand that our countries security is at stake; however, the amount of training and location of that training must be balanced with the surrounding communities and environment.</p> <p>With the proposed increase of helo operations, noise pollution would increase dramatically affecting ALL citizens of Imperial Beach, especially those like myself and our family that live close to the beach and existing training areas. If the amount of helo operations and training that you are proposing already existed, then certainly we would have no right to complain, but we bought our home and have lived here since 2002. We chose to make this our home and to retire here because we like the peacefulness and small town feel of I.B. We enjoy listening to the sound of breaking waves and wildlife, not the sound of helos. If we wanted to hear flight ops all the time, we would have bought our home by the airfield. It is currently 2010 and one plane has</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why</p>

#	Name or Organization	Comment	Response
		<p>flown directly overhead and 3 helos have passed by while I type this. I do not believe it is fair that we should have to suffer through increased noise when other training areas exist that would meet the Navy's NSW training requirements.</p> <p>Camp Pendleton offers large training areas to include military air space, small and heavy weapon ranges, beach access for amphibious operations, ammunition storage, helo landing sites, and various supporting facilities and infrastructure. This area is much larger than the limited area on the strand and there is much more open acreage between San Diego and San Clemente. Although not as convenient to NAB Coronado or the Advanced Training Center, it is close and would meet the "balancing act" that I stated earlier. The impact at Camp Pendleton would be much less felt than here on the strand.</p> <p>My wife and I sincerely hope that you will find alternative training sites that already exist that can handle a larger capacity of training that will not be nearly as detrimental to a small beach community such as I.B. which already faces so many challenges in these tough economic times.</p>	<p>alternate locations are not feasible.</p> <p>No fixed-wing aircraft are included in the Proposed Action. The helicopters associated with training operations at SSTC-S do not overfly Imperial Beach. These helicopters depart from and return to NASNI. They approach the training areas from offshore, approaching and departing from the training areas over water.</p>
100.	Gary Klopp	<p>Although Imperial Beach is an extremely unique small town beach community, we continue to struggle economically for several reasons: Our proximity to the Mexican border and Tijuana, degraded water quality due to runoff and pollution from Mexico, lack of small business infrastructure, school ratings, and past stigmas are just a few of those reasons. Even with all the challenges I.B. faces, we have a lot in our favor, and every year brings more and better change albeit slowly. If you push forward with the proposed increases of training, helo operations, and live fire, you will certainly hinder this city and the people of I.B immensely. This area, and the surrounding area just can't handle the volume of increased training that you are proposing. Property value will be affected and home ownership will decrease. It will be even harder than it already is to attract new families to our town with all the noise and disruption that will certainly be experienced if your training proposals get approved. You currently aren't conducting training in front of the Hotel Del or the area between the hotel and North Island, or even the beaches on North Island, why I.B.? Because we don't hold the clout and financial means as a community that Coronado does? Other training areas already exist that would meet the Navy's NSW training requirements. Spare I.B.</p>	<p>The SSTC training areas have been used by the Navy for over 60 years. Increases in training activities associated with the Proposed Action and alternatives are not expected to disrupt normal business operations or affect property values in southwestern San Diego County. The analysis presented in the EIS in Section 3.15.2.3.1 determined that regional and community employment, housing, and population growth would not be affected by the Proposed Action. Currently, training is conducted on the rocks in front of the Hotel Del Coronado as well as all training areas discussed in Chapter 2.</p>
101.	Gary Klopp	<p>Many studies have proven that people who live near airports have a much higher than national average of cancer due to all the exhaust and fuel that is released into the air. Under the proposed plans, helo flight hours would increase dramatically certainly affecting the air quality surrounding Imperial Beach and outlying areas.</p>	<p>The Navy has analyzed the emissions from helicopter flights associated with training activities at SSTC in the EIS and has found that neither the current nor future emissions exceed current regulatory limits</p>

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102.	Gary Klopp	<p>Again, having been a member of the NSW community since 1990 and a NSW operator since 1994, I have seen a lot. Although the Navy has taken big steps in recent times to address environmental concerns, and as a nation, we have become much more aware of our environment and how our actions affect everything around us, the amount of detrimental effects on the environment along the silver strand training areas will increase drastically. Unused ammo (blanks) get dumped over the side. Food wrappers, MRE packaging, various operating items (550 chord, line, rubber bands, night sticks, etc) all get mixed into the environment. Shell casings, links for the ammunition, fuel oil from the zodiacs, exhaust from the craft and air assets, batteries, etc. Even with the best of intentions, all this is unavoidable. Men get wet, cold, hungry, tired, mentally and physically exhausted, and everything always goes wrong at the worst possible time. Believe me, I know from experience! The precious beaches that encompass and surround these training sites provide endangered habitat and wildlife refuge and the ability to recreate. These species of animals and plants struggle for survival everyday in a world that continues to build and shrink their natural habitat. The noise pollution, air pollution, water pollution, and human pollution that is simply unavoidable during the types of amphibious operations that will be conducted with alarming frequency will only continue to make the environmental concerns bigger. Along with all of these issues, is the simple fact that people live here to enjoy the beach, wildlife, and ocean. Increasing the training that you are proposing does nothing to benefit anyone or anything in I.B or the Silver Strand. Please use training areas that already exist that can better support the large volume of training that you are proposing.</p>	<p>Most of the training materials used at SSTC are non-hazardous, or are rendered non-hazardous when they function as designed (e.g., blanks). Trainees collect and remove expended materials to the extent practicable at the conclusion of their training events. Very rarely, energetic items may not function as designed, resulting in their temporary presence until promptly retrieved by Navy personnel. The incidence rate of expended items that would pose a risk to the public is so low that a public education and outreach program is not warranted. The species management explained in this EIS establish habitat areas within the training areas to protect species.</p>
103.	James M. Knox	<p>3.1.2.3.2 Beach Activities How many more activities and restrictions will take place over and above what is done now at SSTC-S?</p>	<p>Information on activities and restrictions is listed in Section 2.2.3 as well as in further detail in Section 3.1.2.3.2. Listing the exact number of activities that will take place at SSTC-S is not possible given that many activities could also occur at SSTC-N and NASNI. An additional sentence has been added to 3.1.2.3.2 to indicate as such. Tables 2-1, 2-2, and 2-3 in Section 2 of the FEIS list the training activities and areas where training activities may be scheduled.</p>
104.	James M. Knox	<p>3.5.1.4.2 &amp; 3.5.1.5.2 Pacific Ocean Contaminants Your report states that most of the contamination of the area is cause by sewage from the river mouth and/or the South Bay Ocean outfall. Storm water runoff has a relatively minor influence on local water quality. Table 3.5-5 Will increased training at SSTC-S cause more contaminates to reach the ocean by storm water runoff. Rain events occur mainly in the winter when ocean currents in the area are north to south. Were seasonal changes in ocean water movement taken into account when the findings on contaminants were formulated?  3.5.1.5.2 Pacific Ocean Silver Strand State Beach does have day and overnight use numbers that were not included in this report. I would question the conclusion that the information presented is not representative</p>	<p>The potential for increased concentrations of pollutants in waters along the Silver Strand under the Proposed Action is negligible. Seasonal changes in littoral currents along the Silver Strand may affect the dispersal pattern of pollutants from the Tijuana River or from water treatment plant outfalls. Section 3.5.1.4 of the FEIS indicates that contaminants entering the ocean during storm events are generally conveyed via impervious surfaces. For contamination to occur, the contaminants must be present at the surface during a precipitation event, and the surface must be relatively impervious. Residues from the use of flares and smoke grenades constitute the majority of contaminants from training</p>

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		<p>of the use of the municipal beach in Coronado. The report, in other sections, extrapolated information that was used for conclusions without complete numbers. Navy recreational areas (Gator Beach and Fiddler's Cove) should not be included as recreational opportunities. They have restricted access and are not open to the general public.</p>	<p>at SSTC. These materials are widely dispersed over the training areas at very low concentrations. Wind erosion of sand and loose surface soils likely results in further dispersal of these materials. When precipitation occurs, most of the rainfall - along with any traces of these residues - infiltrates the soil or sand, and does not run off into the ocean.</p> <p>The EIS states that the use numbers for visitors to SSSB are not representative of the actual use of the ocean waters adjoining the beach. In other words, there is no known correlation between the number of visitors and: (a) the number of individuals that enter the water, (b) how far from the beach those water users travel, (c) the time those individuals spend in the water, and (d) the times of day this use occurs.</p> <p>W/re recreational use of SSSB, this issue has been addressed in 3.1 Land Use, and any implications for Pacific Ocean water use will be carried over into the 3.5 Water Resources section.</p>
105.	James M. Knox	<p>3.6.1.5.2 &amp; 3.6.1.5.3 Will LCACS be used on both Purple 1 and Purple 2?</p> <p>3.6.1.6 The Navy should also notify residents. The sound of M16's and 50's along with concussion grenades without notice very late at night or early in the morning can lead to apprehension if a person does not know that training is taking place. Explosions and small arms fire are easily detectable from my home, and loud enough to wake me up.</p> <p>Table 3.6-5 Helicopter Pass-by Sound It has been my experience that the Helicopters used during training are, during many of the evolutions, closer then stated in the table.</p> <p>3.6.2.3.1 Traffic on ST-75 (local roads) Silver Strand Blvd in Imperial Beach leads to the main gate of the South Complex. How much will traffic increase on this residential street? How will this increase in traffic affect the acoustical environment of this residential neighborhood?</p> <p>3.6.2.3.2 New training activities will increase helicopter use. (TRAP) (N9, Table 2-2) Disagree with conclusion that noise level will not change. Each flight is a separate event, with individual</p>	<p>LCACs can train on Purple 1 and 2, but are typically trained on Green, Red and/or Blue.</p> <p>The Navy is currently discussing alternate means of notification than those already described currently in Section 3.6.1.6.</p> <p>Baseline traffic volumes on Silver Strand Blvd. are discussed in Section 3.14.2.2.1 and increases in traffic volumes on Silver Strand Blvd. under Alternative 1 are discussed in Section 3.14.2.3.1. The Proposed Action would increase military training traffic along Silver Strand at the entrance to SSTC-S from about 147 to about 249 round trips per day, or by about 102 round trips. Residents would notice a 69-percent increase in vehicle pass-by noise. As discussed in Section 3.6 of the Final EIS, however, the additional vehicles would increase traffic noise along the street by less than three decibels, which is a barely noticeable change in the average hourly sound</p>

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		<p>consequences regarding sound. Weather, temperature, wind direction, and pilot skill all contribute to each event. Suggesting that the helicopters will always be in their assigned flight lanes without data is an assumption. The helicopters get out of their flight lanes many times (personal observation). Training evolutions may have variations that are not foreseen. This fact needs to be taken into consideration when making conclusions. More use equals more sound in the adjacent residential areas. Citing the ambient sound of the surf supplies no useful data without knowing; the size of the surf, the direction of the swell, the direction and strength of the wind, and the tidal level. None of this information is contained in the table.</p>	<p>level.</p> <p>The reference to the sound of the surf masking the sound from distant training events has been deleted from the Final EIS. With regard to helicopter sound, the analysis indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. Because of the logarithmic nature of sound; a doubling of sound energy results in only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p> <p>The typical flight pattern in support of SSTC-S inland training usually consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p>
106.	James M. Knox	<p>3.6.2.3.4 Amphibious Training                      Increase from 10,000 to 13,800 LCAC 8 to 40 (increase of 5 times current) I must disagree with the conclusion. While the average sound during each evolution may not increase the amount of times of discomfort will increase by a factor of 5. (40 instances verses 5 instances). Each time an LCAC lands is an individual event with individual consequences regarding sound Depending on wind conditions I can easily hear the LCACs when they are used on the purple beaches at the north end of the South complex.</p> <p>3.6.2.3.5 Munitions</p>	<p>LCAC landings associated with the Craft Landing Zone would remain the same under Alternatives 1 and 2 as under the No Action Alternative (4 per year). However, LCAC landings associated with Amphibious Raid activities would increase from 4 per year to 36 per year. Thus, overall, LCAC landings would increase from 8 per year to 40 per year. Because these activities would be distributed over time and likely occur at different locations along the beach, the increase in LCAC sound at any one receptor would not increase proportionately.</p>

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		<p>Sound generating activities will increase by 48%. How much of this 48% will be at the South complex and at what times of the day or night?</p> <p>3.6.2.3.7 Summary Alt 1 Finding of no adverse effects. The last paragraph states the sound levels would increase during all days and hours of the week with no notice to residents. I would disagree with the conclusion of no adverse effects. Residential areas will be affected.</p> <p>3.6.4 Table Why were no residents of Calla or Citrus Avenues interviewed?</p> <p>Table 3.6-11 Summary of Effects Mitigation: Please add notifies residents and local emergency personnel.</p>	<p>Additionally, the audibility (ability to hear) of an event does not equate with discomfort.</p> <p>See response to comment #1 regarding proposed increases in sound-generating activities. The distribution of activities between day and night is variable, but most training activities would occur during daylight hours on weekdays.</p> <p>Last paragraph does not conclude that there would be no adverse impacts nor does it indicate that there would be "no notice to residents". The paragraph simply states that acoustic sources will generate noticeable noise on weekdays and infrequently at night or on weekends.</p> <p>Interviews were only done near locations where sound level measurements were taken for correlation purposes.</p> <p>The Navy is currently discussing alternate means of notification than those already described currently in Section 3.6.1.6. This table has not been modified.</p>
107.	James M. Knox	<p>3.14.1.4.2 Palm Avenue &amp; 3.14.1.4.3 The description is wrong. To continue West on Palm after the four way stop at 3rd street you must be in the left hand lane. The right hand lane on Palm is right turn only. This causes large backups at times at the four way stop and also makes it very hard to turn left onto Palm from Silver Strand Blvd. Palm Avenue has been restriped for two lanes West of Third street until Seacoast Drive. Rainbow Drive is striped for two lanes. What counting devices were used and when was traffic counted by SANDAG?</p> <p>3.14.1.4.4 The entrance to Silver Strand Blvd. from Palm Avenue has changed in the last year. It is now a sharp right hand turn to a narrow road that slowly winds left and widens. Why was no study to measure ADT done by the Navy?</p> <p>3.14.1.5.2 SSTC-S The Camp Surf entrance is on the West side of Silver Strand Blvd, half a block from the entrance gate to the Training Complex.</p> <p>3.14.2.2.2 Ground Transportation Last paragraph: No data on Silver Strand Blvd. to support conclusion.</p> <p>3.14.2.3.1 249 trip in means 249 trips out for a total of almost 500. This is a significant increase in traffic</p>	<p>The ADT of Silver Strand was taken from the County of San Diego Department of Public Works, 1999. Public Road Standards. Adopted July 14, 1999. This is a public road and the ADT was calculated for all traffic, which would include any military traffic. FEIS used these ADT amounts to determine the contribution to overall traffic on public roads from military activities. In lieu of funding an additional ADT study, this was assumed to be an appropriate method for determining military contribution to overall traffic.</p> <p>As previously discussed, traffic volumes were not available for Silver Strand Blvd., the roadway that provides access into SSTC-S. However, based on the County of San Diego Public Road Standards, typical roadway capacity for a residential street operating at a LOS C is 1,500. The assumption is that without an ADT, the roadway is operating at this typical capacity. Section 3.14.2.2.1 states that the current level of trips associated with military activities is 147 into SSTC-S. As stated in Section 3.14.2.3.1, the increase in ADT from the No</p>

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		<p>on a short residential street.                      3.14.3 Mitigation Measures                      I would suggest opening the North Gate for groups of over three vehicles to help reduce the approximately 500 daily trips to the South Gate on such a short residential street as Silver Strand Blvd.</p>	<p>Action Alternative and the Proposed Action will be 102 (147 to 249). This will increase the overall ADT (assuming operation at normal capacity for a residential street at "C") to 1602, which represents a 6.8 percent increase in ADT.</p> <p>The comment assumes that a "trip" is one way, when ADT is actually a total traffic count. 249 is NOT 249 trips in and 249 trips out, it is just 249 total trips. The current level of trips associated with military activities is 147. The increase in ADT from the No Action Alternative and the Proposed Action will be 102. This will increase the overall ADT (assuming operation at normal capacity for a residential street at "C") to 1602, which represents a 6.8 percent increase in ADT.</p> <p>Regarding Navy personnel access into SSTC-S, based on your suggestion, the Navy is researching the possibility of using the north truck gate for ingress/egress into SSTC-S.</p>
108.	James M. Knox	<p>4.2.1 Table 4-1                      Why does sand need to be removed and relocated? Where is the sand that is removed being relocated?</p> <p>4.3.6                      Sounds associated with redevelopment in Imperial Beach have nothing to do with sounds that come from training activities in the South Complex.</p>	<p>Due to erosion, sand is blown up the beach of SSTC-S and is caught by the SSTC-S perimeter fence. The sand that is caught creates a dune which makes the fence passable. This creates a base security issue and must be tended to on a regular basis. The sand is relocated to areas on base where beach replenishment is needed, as defined by the Naval Base Coronado Integrate Nature sources Management Program.</p> <p>All sounds from all sources within the region of influence have been analyzed and considered in the cumulative impacts analysis within Table 4-1. The Navy analyzed the noise contribution that the Proposed Action would have in light of all other sources in the area.</p>

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109.	N.J. Kuebler	<p>I would encourage the EIS to do a more thorough study of the traffic impact on the Silver Strand/Hwy. 75. I read the interview Delphine Lee did with KPBS in which she commented that current traffic is 1% of the throughput there.</p> <p>My address is a "rim" home in the Coronado Cays residential area. Weekdays, I can tell what time it is from the volume/noise of traffic, in spite of double paned windows and two useless "sound walls" along the perimeter of the complex here.</p>	<p>The Navy has reviewed applicable traffic studies and has presented their results in the respective section of the EIS. While there is an abundance of traffic along the Silver Strand / Highway 75, it should be noted that the statement being referenced only accounts for traffic that is associated with the training activities at SSTC. The impact of that traffic (only associated with the SSTC training activities) relative to the overall traffic on area roads is presented in the Section 3.14 of the EIS as well as the cumulative section of the EIS. Currently, intersections and roadways within the Region of Influence typically experience an acceptable LOS. Although the intersections at Gates 1 and 2 experience unacceptable LOS, traffic related to the Proposed Action represents less than 1 percent of the morning volume and less than 2 percent of the evening traffic at these intersections.</p>
110.	N.J. Kuebler	<p>I believe the residents of Coronado, Imperial Beach and the Silver Strand areas could use more information published or mailed in regard to this EIS study. I ran across terms in online pages regarding the study such as "elevated causeway system", "fluid transfer system", "new platforms and equipment", and "new training". Without knowing what those are, how can we consider the impact they might have?</p> <p>The full pdf document would not download for me, and there are many who cannot access it at all or make it to the public meetings. I hope you will use your resources to make the information we need more available.</p>	<p>The terms in question are defined in full in Section 2 of the EIS as well as Appendix B. The potential impacts of training activities using these platforms or equipment is analyzed in respective sections of the EIS, which is also available at both the Coronado and the Imperial Beach public libraries.</p>
111.	Stephen LaPalme	<p>Your comment dropdown list should allow you to comment on several issues since many are interconnected. I am VERY MUCH AGAINST the military increasing it's activities and foot print in the silver strand area. If anything they should be considering downsizing and eventually closing the bases since they are incompatible with domestic and social harmony. Any considered activities should be relocated to the Camp Pendleton base due to it's substantial land area and distance from populated locations. Military drones and the removal of personnel from Afghanistan and Iraq make this increase in activity unwarranted and unnecessary. As general and president Dwight D Eisenhower said, "beware the military industrial complex". Increased military activities = increased military contracts= a negative draw on society and the economy.</p>	<p>The Navy strives to be a good neighbor and analyzed all training activities at SSTC with respect to applicable air and water regulation. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible. Navy and Marine Corps</p>

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			<p>training ranges are complimentary and used for different functions to complete a full military training curriculum for all commands.</p>
112.	Barbara Lathrop	<p>As an owner and resident of the Coronado Cays I would like to express my very serious concerns regarding the proposed increase of training and helicopter flights along the silver strand. At present helicopters are flying over the Cays although it was my understanding this was not to happen. Wwith the proposed increase of helicopter flights by 185% this is frightening to me.</p> <p>The expanded activities will disrupt the lives, well being and sleep of the residents of the cays considerably unless the paths of travel to and from the training areas are limited to at least 1000 yds off of the ocean and into the bay on the bay side. All residents on the silver strand will be affected as well as beach users at the Silver Strand Beach park, a park used by many all summer. I live halfway between the bay and the ocean and am disturbed by the current helicopters flying now and the proposed night flights and increases will cause great distress and disturbed sleeping that will affect the health and quality of life for us all. The entire Strand is a recreation area used by runners, joggers and bicycle riders and the increased training with the noise and smoke from some of this training will destroy one of the loveliest areas available for these pursuits. I beseech you to give my requests your consideration to preserve the environment of this beautiful area.</p>	<p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>
113.	Barbara Lathrop	<p>As an owner and resident of the Coronado Cays I would like to express my very serious concerns regarding the proposed increase of training and helicopter flights along the silver strand. At present helicopters are flying over the Cays although it was my understanding this was not to happen. with the proposed increase of helicopter flights by 185% this is frightening to</p>	<p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove,</p>

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		<p>me.                      The expanded activities will disrupt the lives, well being and sleep of the residents of the cays considerably unless the paths of travel to and from the training areas are limited to at least 1000 yards off of the ocean and into the bay on the bay side. All residents on the silver strand will be affected as well as beach users at the Silver Strand Beach park, a park used by many all summer. I live halfway between the bay and the ocean and am disturbed by the current helicopters flying now and the proposed night flights and increases will cause great distress and disturbed sleeping that will affect the health and quality of life for us all. The entire Strand is a recreation area used by runners, joggers and bicycle riders and the increased training with the noise and smoke from some of this training will destroy one of the loveliest areas available for these pursuits. I beseech you to give my requests your consideration to preserve the environment of this beautiful area.</p>	<p>and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p>
114.	Becki Lock	<p>While we understand the need to train and perhaps to increase training, many of us do not feel as if the area can sustain the levels of ramped up training you are requesting. This is not a "not in my backyard" issue. This request for increased activity is just plain too much in a relatively small space. There has to be more alternatives and/or a creative way for the Navy to get the training they require (share with Pendleton?) without causing so much potential harm. Quality of life will be severely impacted. Too much noise (often late at night) will cause much disruption to the community which supports you. Beyond that, most are very concerned about the environmental impact. The stretch of beach is very narrow and the many protected species of bird are at risk. Further, the multitude of requested beach landings, more concussion type grenades, more land pollution, and more fuel polluting the water, means there is obvious potential to inflict a lot of damage to the sea life. Please know that we as a community want to continue to support the military. However, the request to increase training to the levels stated is not supported. Many won't state their objection out of fear and feelings of helplessness. So, please consider the community (as we do pay our taxes to support you) when determining what is appropriate.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>

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115.	William and Erna Lockhart	<p>We attended the presentation in Imperial Beach, February 23. Unfortunately, we had to leave before all the comments had been heard, but we were encouraged to voice our concerns, and here are ours:                      Concerns: Traffic on Silver Strand Blvd. Leading into the radio station                      Noise factor due to increase in the sorties                      Number of exercises                      Concern for children's safety at Camp Surf.                      Height of platforms etc. to be built                      Effect on Property values                      We have lived in North IB for 20 years - just a few houses from the gate leading to the radio station. We are enjoying an unobstructed view from our balcony from Point Lorna to Coronado to Silver Strand, unbelievable sunsets, sound of the surf peace and tranquility, and we like it that way. Even Camp Surf took care not to disturb the views when they expanded.                      We understand the need for training to stay alert. Believe us, we are all for the military (my husband is a WWII D-Day 13 veteran with the RAF.) But having the peace in this, as yet undiscovered, quiet little town suddenly being disturbed by that huge increase in sorties (up to 2200), firearms (from 150 to 1400) and training exercises to 5,343 - and in addition the mine-fields, vernal pools, and disruption of the life of endangered species - is a lot to ask of us. 5,343 exercises - There are 365 day a year! So how many a day, month? Time of day? And how many here at beaches white and purple..? Will the helicopters take off from and land close to North end of IB?-                      Is it not possible to incorporate the training with the all the area you have now and have had for 60 years? Yes, it is nice for our nice young military men to be able to go home to their own beds but what about us, the residents, who will have our nights and sleep disrupted? And the building of "platforms" - will they obstruct the view?                      Children at Camp Surf - Concern for their safety with possible discharged bullet casings, mine debris? not to mention the air pollution from the helicopters. Effect on property value, with the increased noise and disturbances. Who would want to buy (now) prized beach properties when they will be having the noise of helicopters and machine guns to contend with?                      Would suggest that in addition to notifying the fire station and police station of upcoming exercises, why not place a notice in our local paper, The Imperial Beach Eagle with a date ( of course, if that is not a secret) so we will not be concerned when we hear the machine gun fires.                      Last but not least, the speed of cars must be controlled on Silver Strand Blvd. There are children, not only in Camp Surf, animals, bicyclist and elderly slow walking people crossing the street. We would like to see a 25 miles zone and a speed bump on Silver Strand Blvd.                      You asked for comments, - and we are giving you ours. Not that we expect to get answers to our concerns directly, but perhaps through some of the additional meetings you no doubt will be conducting some of them will be addressed. We hope so. Thank you for your time.</p>	<p>The Navy appreciates your concern and has analyzed traffic (Section 3.14; Transportation and Circulation), noise (Section 3.6; Acoustics), number of exercises (Chapter 2; tempo of training), children's safety (3.15; Protection of Children), platforms (Section 2.3.4; Introductions of platforms and equipment), and property values (Section 3.15; Socioeconomics within the SSTC EIS.</p> <p>Navy is responsible for traffic on its controlled land. Once personnel leave the base, they are subject to Department of Transportation regulations. Various speed and traffic control measures would be the responsibility of the City of Imperial Beach. Please note that due to this and other similar yours and others comments, the Navy is considering implementing increased signage or message board requesting Navy personnel to obey all posted speed limits, keep radios turned down, etc., as personnel leave the base (similar to what is done on NASNI, Naval Base Coronado, and Naval Amphibious Base).</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying</p>

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			<p>residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC FEIS.</p> <p>Air pollution and noise at Camp Surf are addressed in the EIS within Section 3.1; Air Quality and Section 3.6; Acoustics.</p> <p>The health and safety of the public, in general, relative to the existing and proposed training activities at SSTC, are addressed in Section 3.16, Public Health and Safety. No substantial adverse effects on public health or safety from activities at SSTC-S were identified. The anticipated effects on residents of Camp Surf would be as described for the general public. The potential for mine debris to wash ashore exists, but such an event is very unlikely given the Navy's standard operating procedures. The potential for blank or simunition cartridges expended on land during training to migrate onto Camp Surf from SSTC-S is negligible.</p> <p>All increases in operation tempo are discussed in Chapter 2. To address comment regarding "building of platforms", please refer to Section 2.3.4 of the EIS. Under military terms, a 'platform' refers to new Navy vessels, aircraft, and vehicles and not physical raised areas or stages. The Navy also refers to 'causeway platforms' in the EIS when discussing Elevated Causeway Systems and Roll-on Roll-off Facilities activities in Table 2-1. These platforms will not be obstructing any viewsheds.</p> <p>With regard to property values, the Navy has analyzed the effect of Navy training on the area within Section 3.15; Socioeconomics. Based on the analysis within Section 3.15, existing regional population and associated housing impacts, employment rates, and regional economy would remain unchanged.</p>

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			<p>As listed in NBC INST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.</p>
116.	Donna MacKersie	<p>I have been a homeowner in/resident of Imperial Beach since 1993, and I am very concerned about the Navy developing the Silver Strand further for military training, killing more flora and fauna in that delicate area, and creating additional noise in Imperial Beach, which is already inundated by helicopter noise. I am aware that some people are impervious to noise, but I am not one of them. Since I've lived in I.B., I've been awakened MANY nights by loud helicopters circling my area, typically around 11-12pm, either Border Patrol or Sheriff agents, searching for illegals or whatever they're doing. Additionally, since, after 40 years as a legal secretary, I have been largely unemployed for the past year and a half and have been spending a lot of time at home during the weekdays, there is a CONSTANT roar of airplane engines that we must suffer through during the daytime hours. I understand that there is value in training near the shoreline, but is it not possible to create training locations in areas where we residents and the flora and fauna of the area will not be negatively affected? What about the vast areas in Otay Mesa -- why not train out there? I feel the same about this as I do about the idiocy of building ANOTHER stadium in downtown San Diego, which is already heavily overcrowded, traffic is impossible, etc., etc. -- why don't they build a stadium in Otay Mesa? It's close to San Diego, and there's a huge amount of space out there, and they wouldn't be wasting oceanfront space and creating additional traffic and noise problems for local residents! I cannot even imagine what the traffic would be like if they built a stadium in the National City beach area as was being considered! I-5 is a nightmare as it is during rush hours -- are these developers really that clueless, or are they only looking for increased income? The attorney promoting building the Chargers stadium says that events there won't conflict with the rush hour - - who does he think he's fooling?</p> <p>Please -- train elsewhere! The Olympic Training Center built in the east where there was space - - certainly the Navy can do likewise. I do not want to have to sell my home and move elsewhere because the noise has become intolerable.</p>	<p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>Additionally, the Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. The Navy has developed mitigation measures for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS, most notably Sections 3.11 and Section 3.12, which describe various mitigation for flora and fauna. Helicopter overflights of Imperial Beach consist of pilots transiting from NASNI to NOLF, or performing touch-and-go's at NOLF, for training activities unrelated to the SSTC training activities addressed in the FEIS. Helicopter flights in support of SSTC training activities depart from NASNI, transit over water to the north of Imperial Beach, and approach and</p>

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			depart from the training beaches with as little overflight of land areas as possible
117.	Zeke Mazur	Since the military requires exclusive use of the beach at certain times; I would like the Union Tribune, on its weather page, to list when the beach is closed.	Due to the necessary flexibility inherent in scheduling training activities, it would be extremely difficult to publish notifications in the local newspapers in a timely manner. However, based on your comments and those of others, the Navy is investigating various methods by which to notify the public.
118.	Patricia W. McCoy	<p>First, let me state that I do understand the U.S. Navy's need for combat training readiness to accomplish their mission in various arenas around the globe. However, I do believe there are some items that could be changed enough to make life bearable for people in Imperial Beach, particularly those of us who reside in the northern portions of the city.</p> <p>We have been good neighbors to the Navy in all the years this base has been operational. Now we are asking you for a small quid pro quo. Since some of the noise related exercises are really not mitigable we would request that you consider an earlier cessation of noise causing events, perhaps to 10:00 P.M. This seems eminently reasonable on a work night. The neighborhoods and your soldiers could be home and in bed at a reasonable hour and would conform to demands as outlined in the DEIS that military personnel not be deployed out of country to do this type of training. Many of us have to be up early for work and some of these workers are employed at North Island.</p> <p>We had a dog park opened by the Navy under Captain Gianni (now Admiral) for our use but it was taken away and closed. We would ask that this facility be reopened for use when it is inadvisable to use the beach. This way neighbors can exercise their companion animals and have a pleasant place to go.</p> <p>While you are not expanding the footprint of operations there is concern over the increased intensity of those exercises. The Navy has done a good job with their stewardship of the endangered California Least Tern and the Western Snowy Plover. There is concern for continued viability of these birds due to their habits of beach foraging and nesting, a behavior honed after many thousands of years of developmental evolution. These traits are not changed overnight just because we have a use for their habitat. Protection of vernal pools is essential for the survival of button celery and fairy shrimp. These species may seem unimportant and inconsequential in the scheme of things but I would emphasize that they are indicators of the state of our living environment. The environment is the underpinning of life for all living things including civilian and military alike and the mission of the Navy is to protect not only the</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS.</p> <p>The Navy considered time and location of training so as to minimize disturbances to the local community and does its best to conduct noise-producing activities during the day. However, to train in real-world scenarios that may occur overseas, Navy personnel must train at night. Personnel need to train in these dark, late night conditions to ensure they are prepared for real-world operations.</p> <p>The area referred to as a Dog Park has not been formally established through a formal real estate agreement in accordance with Navy policy. The Navy currently has identified this area as needed for training and is not available for public use.</p> <p>The Navy will be completing a Vernal Pool Management and</p>

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		<p>civilian population of this country but also the land that sustains us.                      As you state in the DEIS, this area is unique and as far as I am concerned it is uniquely beautiful and irreplaceable in its current form. I urge you to go the extra mile to protect the nation's endangered species and avoid a "take" of any of them.                      As a former California Coastal Commissioner I have seen well meaning uses degrade and destroy entire ecosystems on which we all rely.                      The comment period is all too short for a document ten years in the making. It would be greatly appreciated if the comment period could be extended at least another 45 days to accommodate those who would still like to respond to this eight hundred plus page document.                      In conclusion I would like to remind you of the inconsistency of water quality due to sewage contamination particularly in the winter months. I do not like the idea of your young service people working in water whose quality leaves, at times, a lot to be desired. I would suggest you implement a water testing component into the document as part of your operations.                      I noticed a deficiency in the document where there is no mention of climate change and sea level rise. I realize this is a NEPA document and it may not cover this topic. I would like to see realistic measures taken to cope with sea level rise. How do you propose to deal with these climate change issues in order to protect our investments at this site?</p>	<p>Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS. The Plan will include focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. No button celery has been documented in any of these pools during past surveys, only San Diego fairy shrimp.</p> <p>The Navy appreciates the public involvement in the NEPA process. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30th.</p> <p>Ocean and bay water quality, including the effects of discharges of treated sewage and storm water runoff, are addressed in Section 3.5 of the FEIS. Because the purpose of the EIS is to address the effects of the Proposed Action on the public and the environment, rather than on itself, the effects of ocean water quality on military trainees are not addressed in the FEIS. The Navy takes the health and fitness of its personnel seriously, however, and closely monitors the conditions under which training activities are conducted.</p> <p>Climate change is addressed in Section 4 of the FEIS as a cumulative impact on the public and the environment to which the Proposed Action would make an insignificant contribution. Because the purpose of the EIS is to address the effects of the Proposed Action on the public and the environment, rather than on itself, the effects of sea level rise on the Proposed</p>

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			Action are not addressed in the FEIS. While sea level rise was not specifically addressed, the proposed training activities do not require any fixed facilities that would require protection or relocation. The primary effect of sea level rise on Navy training activities on SSTC would be a decrease in the width of the training beaches. Ground access to the beaches and local weather conditions might also be affected.
119.	Deb McKay	I find access to the draft EIS problematic. While the electronic version is available in pdf, it is an extremely large file that takes time to download. Accessibility to the document would be enhanced if it were available in smaller, downloadable files. An excellent example of this is the format used by the Southern California Range Complex EIS website whereby you can search for information by chapter or section. I can dig down to the areas that interest or affect me and not have to wade through the entire, voluminous document.	Your comment has been noted
120.	M. Dan McKirnan	The Recovery Plan for least terns is old and based on outdated information so there is no valid way to conclude that the additional take by alternatives 1 and 2 will not further jeopardize the species. Can the EIS provide a Species Viability Analysis that reflects current knowledge and cumulative impacts? Alternatives 1 and 2 describe the potential taking of the endangered least tern and snowy plover with the expanded military activity. I understand the law that allows incidental taking of birds during military readiness activity. What specific actions will you take in adaptive management if it is determined that excessive taking of least terns and snowy plovers is occurring? Military training in Alternatives 1 and 2 will produce significant noise impacts that could flush significant numbers of migratory birds in the Bay and along the Strand. As you referenced, this impact is more detrimental to birds naive to noise created by military activity. What adaptive management strategies will you use to study noise effects on migratory birds and make appropriate adjustments to protect birds during the migratory season? I applaud the Navy for their past efforts to protect the endangered least tern and snowy plover. However, I am not convinced that the proposed Alternatives 1 and 2 will adequate protect these species.	The USFWS is responsible for such a viability assessment, while the Navy is responsible for management and contributions to least tern recovery, which are listed in detail in Section 3.12 of the FEIS. The take estimates are worst case scenario, and in actuality the birds tend to redistribute to safer areas. The Navy is proposing to develop and implement a long-term site enhancement plan for SSTC-N, including both the oceanside and the bayside beaches. The long-term site enhancement plan is estimated to more realistically mitigate for an estimated 360 nests annually. This site enhancement plan will work to control and where possible remove invasive non-native vegetation on the beaches, and if appropriate, replace it with native vegetation. SSTC-N oceanside training lanes currently contain over 16 acres of overgrown invasive vegetation (Table 3.12-13), mostly towards the back one third of the beach. While this additional depth of beach is needed for several reasons, including providing separation from the highway, most training has a minimal footprint on this area. Training is most heavily concentrated in areas closest to the tide line. Removal or replacement of invasive overgrown vegetation in the back beach area will open these safer areas up to nesting activity.

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			<p>Additionally, the nature and level of expected take has been addressed in a Biological Assessment and the Navy has completed consultation with the USFWS and a Biological Opinion was signed July 7, 2010, which concluded that with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of Endangered species Act -listed species.</p>
121.	M. Dan McKirnan	<p>I am not convinced that the proposed increased military training activity in SSTC-S in Alternatives 1 and 2 does not raise the question of environmental justice for the City of Imperial Beach. As you indicated, this community has more poverty, 16.8% of persons living below the poverty line compared to 7.6% for the City of Coronado and 11.3% for San Diego County. Imperial Beach also has a higher % of Hispanics (43.9%) compared to Coronado (13.1%) and the County (29.9%). This community will experience more noise related to the military training activity with Alternatives 1 and 2.</p>	<p>The analysis in the FEIS indicated that both communities will be affected by the increase of military training activities. The discussion in Section 3.15 of the EIS states that this is not disproportional towards one community or the other.</p>
122.	M. Dan McKirnan	<p>4.3.3.1 Global Climate Change Table 4-3: Greenhouse Gas Emissions describes a doubling of emissions in tons/year with either Alternatives 1 and 2. The Secretary of the Navy has established several goals for the Navy's consumptions of fossil fuels with hybrid vehicles by 2015 and alternative energy sources including wind and solar by 2020. Alternative 1 and 2 will increase CO2 emissions by 60,554 tons/year. Why can't this EIS describe specific actions at SSTC, NASNI and NAB to offer at least 50% offsets in alternative and renewable energy for Alternatives 1 and 2?</p>	<p>As stated in Table 4-3, these data show the increase in annual CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions estimated for the Preferred Alternative (60,554 metric tons) and the CO<sub>2</sub>e emissions generated from all sources in the U.S. in 2006 (7,054 million metric tons) (USEPA 2009). Therefore, CO<sub>2</sub>e emissions associated with the preferred alternative would amount to approximately 0.00086 percent of the total CO<sub>2</sub>e emissions generated by the U.S. Under any of the alternatives, cumulative impacts to global climate change would be minimal.</p> <p>The Navy does not have offsets for the Proposed Action however, the Navy has been at the forefront of nonrenewable fuel reduction. The Navy has decreased energy usage on base through mandatory requirements; activities on the Silver Strand have been scheduled to reduce the numbers of vehicles transporting troops to activity areas to reduce driving time. Navy Secretary Ray Mabus stated that 50 percent of the Navy's energy will come from alternative resources by the year 2020. In the past year, the Navy has invested more than \$100 million in renewable energy projects throughout the Southwest. For example, the Navy is developing are</p>

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			<p>geothermal energy projects. These and other initiatives have lowered the Navy's overall energy use by almost 18 percent over the past six years, and it is on track to achieve a 30 percent reduction by 2015.</p>
123.	M. Dan McKirman	<p>6.2 Relationship between short-term and long-term productivity. The EIS describes military activities in Alternatives 1 and 2 as long-term. Does this mean these areas will be needed for decades? What if our need for military readiness declines in 5 or 10 years and peace breaks out? What adaptive management procedures will be undertaken to restore lost habitat and species impacted by this military activity? I endorse the No Action alternative and urge the Navy to reconsider the use of the vast Camp Pendleton site for this surge period of training.</p>	<p>The increase in training activities is not the only driver for the Navy's Proposed Action but also the changes in types of training and platforms, as well as a need for diversity in training. If there is a decrease in training, many of the conditions will tend towards current use because of the natural tendency of training towards training lanes 1-7 and 11-14 (vs. 8-10) as well as a natural tendency towards the northern developed area of SSTC-S (vs. the undeveloped southern areas of SSTC-S). Implementation of the Proposed Action would occur over a five year period. Training activities will be evaluated in five years (2015) for the accuracy of meeting 100 percent of the training requirements as analyzed in the EIS. If new mission requirements are necessary to support training needs, supplemental NEPA documentation may be required.</p> <p>Management practices as well as measures to mitigate potential impacts to the SSTC environment have been presented in the individual resource sections of the EIS. Possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training.</p>

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124.	Tracy McPherson	<p>I simply want to say that the city Councils of Imperial Beach ( the no growth/no change/no communication council) and Coronado City Council (the now yuppified group that has forgotten that the U.S. Navy has supported them for decades) need to get their collective heads out of the sand or wherever they are and get out of the way. You have a job to do, train these people and help keep America America. Go Navy. I am in the flight path of the helicopters and I do hear the gunfire occasionally. I am right across S75 from the old ComCenter.</p> <p>I am reminded every time I hear this or the jets from North Island, those are our planes and guns, the voices I sometimes hear are American. Thank You God I am safe today and tonight. I am a civilian, my former/late husband flew Willie Victors out of North Island. God Bless all of you, do your job as it needs to be done.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. In light of this proximity, the Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area and has presented these in the EIS. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation.</p>
125.	Robert Miller	<p>Growing up in San Diego just before and during the Second World War and living in San Diego, Coronado and Imperial Beach allows for a perspective on this ribbon of sand known as the Silver Strand. I lived in the Coronado Shores for over ten years and looked out on the Strand many times each day. Being in Imperial Beach for the past fifteen years I have been up and down the Strand countless times, mostly driving, but occasionally on foot.</p> <p>This site is world class - sun, warmth, light, open space, mild climate, ocean breezes, ocean, beautiful beaches, harbor, blue skies, aquatic activities - you name it. Housing, lodging and recreational facilities and military activities existing alongside habitat preservation and restoration makes for a unique combination that has been developed over the decades and cannot be found anywhere else.</p> <p>However, walking from North Island all the way to Camp Surf in Imperial Beach it is obvious that this narrow spit of sand is past the saturation point and cannot tolerate more human activity without there being a wholesale change of character. This area is overwhelmed by traffic, military, civilian and recreational activities and plainly, to me, has passed the tipping point.</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>
126.	Ronald and Nancy Mires	<p>While everyone should be concerned about all the items on the subject list, we also should be aware that the Navy has always been a good neighbor in Coronado and tries it's best not to disrupt people's lives or the habitat more than is absolutely necessary. Coronado is a Navy town and we should be happy and proud the Navy is so prominent in our community. Some citizens may be inconvenienced by heavy traffic for a few hours each day and there may be some impact on the beaches or the birds, but it's a small price to pay for the freedom we enjoy from having a highly trained military force. We're in two wars at the moment and there is a need to train more troops..so we all need to let the Navy get on with their hard work. I know many of our fine training operation 100%.</p>	<p>Your comment has been noted.</p>
127.	Roland Moritz	<p>As a resident in the Coronado Cays, and a retired USNR officer previously stationed on a DDR in San Diego in 1953. My new bride and I rented in Coronado during that period and decided at that time that Coronado would be our eventual retirement location. Since 1997 we have been fortunate to be living that dream. The news of the Navy's plans to impact our paradise in such a huge way comes as a great shock and disappointment to us. We have always been happy with the thoughtful and considerate presence of the US Navy in our beautiful community of</p>	<p>The Navy recognizes its proximity to surrounding communities and has attempted to structure its training activities to achieve operational readiness while minimizing any potential impact to the surrounding area. Due to a number of factors (training area availability, environmental constraints,</p>

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		<p>Coronado. I must point out, however, that the aircraft passing overhead on their landing approach to North Island Naval Air Station does result in noticeable pollution in the air we breathe as well as the layer of fuel and exhaust deposited on our community as the aircraft pass overhead. This, when multiplied as a result of the proposed large increase in air traffic over our area will certainly result in considerably aggravated detrimental health impact to our citizens. And, as Coronado and the Coronado Cays populations are made up of many retirees, the health impact would undoubtedly be even greater. And, of course, the added noise pollution must not be overlooked. With regard to the EIR, I would respectfully request that my concerns be received with consideration and the good Navy neighbor policy which has been appreciated over the years. Let me conclude by suggesting that a location for such a large amount of air traffic should take place in largely unpopulated areas such as the Marine Base at Camp Pendleton, and other such underpopulated areas. Sincerely, Roland Moritz</p>	<p>proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>
128.	Omar Nicieza	<p>I am 80 years old and my wife is 70. I worked hard for my weekly check until I was 72. My wife did the same, and now our golden years are plagued by the excessive noise of the helicopters that deprive me to sleep, and the intrusive black dust that keeps my wife obsessed with cleanliness. Now to crown the situation, comes your 10 years in the making draft: Lets occupy the rest of the open spaces; lets go from 700 flies to over 2,000...</p> <p>I understand the frustrations of the Ministry of Defense with the uncertain results of the regular troops after many years of war in Irak and Afghanistan. I understand that with strategic attacks with drones and tough professional Seals, we could obtain better results...</p> <p>BUT, TO PROTECT ME YOU WANT TO MAKE MY LIFE MORE IMPOSSIBLE TO LIVE ??</p> <p>In my working life, I invented a motto that hanged in my office and showed to any big shot that disagreed with a position I took:          "LOGIC SHOULD SUPERSEDE AUTHORITY"          I wish you or your superiors could read it today and think about it...</p>	<p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document</p>

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129.	Laura Orozco	I would just like to say that I would not be very happy if the increase in training would mean more "night flying" by planes and helicopters over our houses. The noise at night would not make any of the Cay's Resident's happy.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document.
130.	Cathy Potter	<p>We were very disappointed to read that you are planning to expand the Navy's training program in Coronado.</p> <p>The areas we've seen on maps for this increased activity seem way too close the lovely Hotel Del Coronado and the residential towers south of the hotel.</p> <p>It seems the increased activity and noise will be detrimental to the enjoyment and safety of the beach by residents and visitors.</p> <p>We strongly urge you to reconsider your plan and move the training farther down the beach or use other sights such as North Island or even Camp Pendleton away from residential areas.</p>	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.
131.	Ann Price	Our Military is in need of every training resource it can utilize. While I am all for protecting the environment I feel that the Navy needs to have areas to train in order to protect the American people AND the environment. We need to start thinking about human life first, then nature preserves, etc.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area, and has presented these in the EIS. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation.

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132.	Dierdra Price, Ph.D.	<p>I am a resident of Coronado and have lived in Coronado Shores for 26 years. I recently learned that the Department of the Navy is planning to increase the levels of training at the Silver Strand Training Center. Our family hears the training that goes on throughout the year. It is already loud and obtrusive. We live under a flight path that has substantially raised its activities in recent years. Planes and now helicopters not only fly more often, they fly closer to our buildings at all hours of day and night. In the past, planes flew out further over the ocean instead of buzzing close to our residences. To discover that you are proposing to increase training from 3926 annual activities to 5543, helicopter sorties from 800 to 2200, and firearm discharges from 150 to 1400, the noise will further disrupt peaceful living. Helicopter noise is grating on the nerves and you are expanding their sorties by nearly two-thirds.</p> <p>I understand that we share Coronado island. The Navy has to take into account that you operate around civilians who live in Coronado. So your sensitivity to our home life is of utmost importance. The Navy has many facilities around the country. So if you choose to expand your training in a residential neighborhood, you must look out for the residents. I hope you will come up with a solution that includes flying planes and helicopters further out over the ocean when training and landing as well as designing your training schedule and location to be as least intrusive as possible.</p> <p>We hope for some semblance of peace and quiet in our home and neighborhood. You are the one to make sure this happens.</p>	<p>Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>
133.	Ambassador John Price	<p>I am deeply concerned with the increased levels of training and the impact it would have on the Coronado Shores and surrounding community. I would appreciate the Navy's cooperation and efforts to maintain the quiet atmosphere which currently exists at the Coronado Shores.</p>	<p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation for activities that may cause an impact to the environment or surrounding area, and has presented these in the EIS. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation</p>

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134.	The Sack Family	<p>This family fully supports the expansion program which we have seen in the local newspapers and as received in a separate mailing to our home. We have lived at the Coronado Shores with a unit facing the beach/ocean for many years and have nothing but respect and support for the training that goes on for the Navy Seals and associated military activities both in the ocean and on the strand.</p> <p>We also would point out that those who bought property or otherwise decided to live in the area were fully cognizant of the presence and importance of the military training and associated activities in this area and do not feel that their complaints are justified.</p> <p>Feel free to use/present this letter in any hearings or reviews that may be underway.</p>	Your comment has been noted
135.	Ray and Lorreta Saez	<p>We have major concerns about the proposed expansion of increased training activity along the Silver Strand. Increasing the helicopter sorties from 778 per year to 2,200 is unacceptable. The helicopters make a significant noise when they pass anywhere near our home. We do not want to live under the conditions occurring around Ream Field. We looked at homes by the Tijuana Estuary in Imperial Beach before we purchased our home in March 1991. Homes in that area are significantly cheaper than the one we purchased because the helicopter noise is intolerable for most people. Our quality of life, health &amp; financial situation would be decreased 100% if sorties were increased to the degree stated.</p> <p>The endangered species living on the bay need to be protected in order to continue to exist on this earth. The Navy should respect that. Another consideration is the amount of noise firearm discharges create. We are sometimes awakened at night by that noise. It seems that the Navy wants to take over most of the area not already inhabited by animals and people. We agree that training our military is important but it should not be at the expense of the quality of life of those of us who live near by. Please consider protecting endangered species including humans by scaling back the training sites, helicopter sorties and firearm discharges. Let's create an environment in which we can live together as good neighbors.</p>	<p>Realism in training is an essential element of SSTC training. Nighttime operations are an important part of training at SSTC-S, to ensure that personnel are prepared for real world situations.</p> <p>The Navy recognizes its proximity to adjacent communities, and seeks to structure its training activities to achieve operational readiness while minimizing potential impacts on nearby residents. The Navy has developed mitigation plans for activities that may affect the environment or adjacent urban areas, and has presented these in the EIS.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Helicopter overflights of Imperial Beach and the Tijuana Estuary consist of pilots transiting from NASNI to NOLF, or performing touch-and-go's at NOLF, for training activities unrelated to the SSTC training activities addressed in the FEIS. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters</p>

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			<p>overflying residential areas are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document.</p> <p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>The commenter’s concerns about increased helicopter sorties, effects on wildlife, and late-night impulsive noise events are acknowledged. As described in Sections 3.10, 3.11, and 3.12 of the FEIS, the Navy has analyzed the potential impacts of training activities to ESA-listed species in detail. Additionally, Section 7 consultation has been completed with the USFWS, which concluded that with the mitigation measures described in the FEIS, the training activities would not jeopardize the continued existence of ESA-listed species.</p>

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136.	Elizabeth Schulman	<p>The EIS is long and detailed. Therefore, I stopped incorporating salient passages. The report itself states that the impact of alternative two is not substantially different than the impact of the first alternative.</p> <p>While the law requires a lengthy and detailed EIS, common sense does not. The report's brief description of the adjoining areas says it all. The populated coastal area simply cannot support more than fifteen hundred additional sorties and deafening helicopter flights. The children (mostly military family kids) at the Strand Elementary School will be unable to concentrate on their studies and may likely suffer hearing impairment. The families in military housing will equally suffer from increased noise levels. Motorists will be increasingly distracted by the sorties on the beach leading to a possible increase in vehicle accidents.</p> <p>An increase in the demise of wildlife seems to have been written off as "friendly fire." Exactly how many birds and sea life are expendable? Do we have a ratio demonstrating how many human lives will be spared as a result of increasing the intensity of training at the expense of wildlife?</p> <p>Is the USN expecting to increase the number of recruits to be trained at the location? It appears the number of recruits is limited by demographics and the lack of a draft. The peninsula-type geography of the area limits the number of recruits who can be run through any program. The Navy Seal Program is reported to have a 2/3 "dropout rate." It appears the Navy Seal training program is sufficiently difficult. Common sense dictates this expansion should not be approved.</p>	<p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Helicopter overflights of Imperial Beach and the Tijuana Estuary consist of pilots transiting from NASNI to NOLF, or performing touch-and-go's at NOLF, for training activities unrelated to the SSTC training activities addressed in the FEIS. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document.</p> <p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.</p> <p>The commenter's concerns about demise of wildlife have been addressed in Sections 3.10, 3.11, and 3.12 of the FEIS, where the Navy has analyzed potential impacts of training activities to ESA-listed species in detail. Additionally, Section 7 consultation has been completed with the USFWS with the signing of a Biological Opinion, which concluded that with the mitigation measures described in the FEIS, the training activities would not jeopardize the continued existence of ESA-listed species.</p> <p>No increase in personnel stationed at SSTC is included in the</p>

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			Proposed Action. There is an increase in activities performed by existing personnel under the Proposed Action. This clarification has been added to Section 2 of the FEIS
137.	Teresa Scott	We live in the Coronado Cays and I and my family strongly support the Navy's training requirements. You folks please do what is needed to train our fine military and we the local community will do our patriotic duty to support you. Thank you for serving our country.	Your comment has been noted.
138.	Timothy Searfus	The requirements of properly training sailors for future missions in support of our country's strategic goals cannot be subjugated to the voices of a relatively small group of people who complain about potential negative effects on marine life, noise pollution and other potential effects of increased training but in fact this group only looks out for it's own selfish interests, i.e., their over-valued coastal properties. I lived in Coronado from 1969 until 2003. "New Money" moved into Coronado in the early 80s and since then various actors have incessantly complained about the Navy and how the Navy is inconveniently disturbing their tranquility; after all, these folks paid dearly for their homes on Ocean Blvd and Coronado Avenue and they conveniently forgot about the monument at Sunset Part at Gate 5 of North Island that says the Navy's first Navy Flying School was established around 1915 at North Island. Huh, so the Navy was there first eh? The Navy bends over backwards to maintain harmony with nature and the Snowy Plover and California Least Tern are direct benefactors of Navy determination to conserve nature. Hell, if it weren't for Camp Pendleton, the Greater Southern California Megalopolis would extend from Ventura County to Tijuana. The increased training activities and concomitant construction in support of this are critical to national security and we as a people owe a debt of gratitude to the U.S. Navy.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation measures for activities that may impact the environment or surrounding area, and has presented these in the EIS. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation.
139.	Louis Semon	My wife and I welcome all activities of the military. We have been living on Coronado both in the Cays and now downtown and found no changes in our quality of life. Continue with the great mission at hand.	Your comment has been noted.

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140.	Robert Shugert	<p>I live in the Coronado Cays. I served 5 years in the US. Air Force and 5 years in the National Guard and I strongly support our Military including the U.S. Navy, U.S. Army and Marines that will be involved in increased military training in the adjacent area to my home. I am concerned about the increased helicopter noise that will result from the substantial increase in "sorties" down the south bay and over my home. I have "learned to live with the present noise" , but to increase it by ten times would certainly impact my life style as well as potentially lowering the value of not only my home but the 1200 homes that exists in the Coronado Cays. I hope that when training that involves helicopters will be limited to day time hours and that the flyway be either out over the ocean or down the middle of south bay.</p>	<p>The current scope of helicopter noise analysis in the EIS is summarized in Section 3.6. Helicopter overflights, including night flights, consist mostly of pilots transiting between NASNI and NOLF for training activities unrelated to the SSTC training activities in addressed in the FEIS. The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p>

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141.	Marie Simovich	<p>My comments focus on vernal pools and particularly <i>Branchinecta sandiegonensis</i>.</p> <p>3.11.1.4.2 Please use current references from the primary literature. This section is poorly referenced and does not reflect a current and solid understanding of the subject. Give details of the vernal pool surveys that were done in reference to <i>B. sandiegonensis</i> including number of pools surveyed, whether surveys were both wet and dry as required by the US Fish and Wildlife Service, the density of cysts in pools, the number of seasons surveyed, the number of fillings surveyed etc.</p> <p>5.10 The mitigation section lacks sufficient details to evaluate.</p> <p>5.10.5 Foot traffic should be severely restricted. Any path can result in altered hydrology and potential pool drainage. Population surveys should be done more frequently than every five years. Plans should include modifications for dry years. Populations should be evaluated for viability and increasing or decreasing population reproduction via both live animals and the cyst bank. Other floral and faunal elements should be monitored. The full crustacean community should be evaluated for richness and composition and this should be included in restoration, mitigation, monitoring and criteria for success plans. Efforts should focus on maintaining not only viable populating of fairy shrimp, but a vernal pool community with species diversity appropriate for the area.</p>	<p>USFWS Protocol surveys were conducted involving two wet samplings. Dry season samplings are unnecessary under this protocol. The Navy will use scheduling and other planning tools to minimize avoid impacts to vernal pools.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
142.	Kent Smith	<p>I have reviewed many of the outlines for and against the increased use of the Silver Strand beach for training. My opinion is undecided because there are many positives and negatives to both sides of this important and relatively permanent decision. I am concerned that no mention has been made of the fact that there are underground tunnels or observation pits that were put in</p>	<p>Excavations are discussed in Section 3.2 of the EIS, and the analysis presented there indicate that there would be negligible impacts from the minimal number of excavations associated with military training activities presented in the EIS.</p>

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		<p>place 30 years ago that may still exist between the shoreline and the roadway. These should be included in any analysis of the environmental impact. As a frequent user of that beach when it more available to the public there were two occasions when I noticed military personnel observing the ocean and beach from ground locations that had to enjoy at least six feet of excavation for it to occur. It is unlikely that these structures (if they still exist) would pose a challenge to the type of wildlife in question but a total lack of mention in an environmental impact statement is not appropriate.</p>	
143.	Yvonne Stowe	<p>The noise from the training that is currently going on is bad enough without more! Sometimes they come so close to the top of our three story condo building it is down right scary. Please reconsider for those of us who live near by. We can't even talk on a cell phone outdoors facing the ecstasy when the copters are going up and down!</p>	<p>Helicopter overflights of Imperial Beach consist of pilots transiting from NASNI to NOLF for training activities unrelated to the SSTC training activities addressed in the EIS. The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>The NBC Commanding Officer has established air operations course rules for Naval Air Station North Island and the Naval Outlying Landing Field (NOLF, note formally known as Ream Field) to conduct safe required training and operational flights while minimizing impacts on the surrounding community. These course rules are designed to promote safe air operations, meet Navy aviation training requirements, and protect communities beneath established flight paths. Pilots are given annual course rule briefs to ensure their familiarity with course rules, procedures, and noise abatement measures. Current air operation instructions (course rules) advise pilots when departing NOLF westward to either fly 1/4 mile south of beach houses or cross over beach houses at or above 800 feet above mean sea level (300 feet above the Federal Aviation Administration's minimums set in Federal Aviation Regulation 14 CFR Part 91, see reference below) until they are</p>

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			near the communication station (old Navy Radio Receiver Facility). Weather conditions, other aircraft in the flight patterns, etc. can and do affect the aircraft's flight route and altitude. Federal Aviation Regulation 14 CFR, Part 91 Section 119, titled Minimum Safe Altitudes, paragraph d states, helicopters may be operated at less than the following minimums prescribed for other aircraft, e.g. over congested areas, 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft, and over other than congested areas 500 feet above the surface.
144.	Anna Stump	I was driving home down the Strand late the other night when out of nowhere I heard machine gun fire, pretty close. I had my car windows closed. I was very startled. If I was not a resident of the area, I would have freaked out, maybe swerved off the road in fear. I feel there should be signs warning drivers, bikers and joggers that military exercises are happening, especially at night. I've also experienced driving through heavy smoke from military beach activities that is distracting and even cuts visibility.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation.
145.	Rick Taylor	I previously lived in a beach community when the Navy upped fighter jet training flights during the war in Vietnam at a nearby Naval air station. Complaints were many and frequent, but were silenced when the CO hung a wall banner facing the residential area which was most vocal. It read, PARDON OUR NOISE; IT IS THE SOUND OF FREEDOM. That is applicable here and now, as well as a like comment re beaches and bird sanctuaries - the Navy was here first and used these beaches unfettered long ago.	Your comment has been noted.

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146.	Kimberly Tolles	As a 20-year resident of Coronado and homeowner in the Coronado Cays (and currently homeowners association board member), I am extremely concerned about the Navy's training complex proposal from the point of view of increased noise, increased numbers of aircraft, more air fuel pollution than we already get, live fire next to homes and public beaches and nighttime activities. I felt the Navy's presentation before the Coronado Cays Homeowners Association Board understated the potential changes represented by this plan to the point of possibly being untruthful. I agree completely with the concerns expressed in the City of Coronado's letter and with the letter from the City of Imperial Beach. Training activities are necessary, of course, and have always been conducted in our extremely small community but to increase them to the extent proposed by the Navy amounts to reckless public endangerment.	The letter from the City of Coronado has been reviewed and the concerns highlighted therein have been responded to and, where applicable, changes have been made to the EIS. The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy has developed mitigation measures for activities that may impact the environment or surrounding area, and has presented these in the EIS. Mitigation measures and management practices are discussed within each resource section and within Chapter 5; Mitigation.
147.	Gary Trieschman	Create public viewing area of exercises (of course w/security clearance) and involve public in reason for training	Adding a public viewing area would encumber training activities (loss of training space) and would be a security issue. In addition, Department of Defense security clearance regulations are only given for a specified need and would not be extended to civilians for observation of training.
148.	Normandie Trovato-Wilson	<p>There are a lot of complex factors in play when it comes to evaluating the impact this will have on endangered and threatened species. Of my particular concern is the training in the vernal pools. 90% of California's vernal pools have been destroyed due to development. I believe the Navy is committed to maintaining environmental integrity at the Silver Strand complex- however, protecting a vernal pool is not as simple as erecting a barrier around a WSP nest. There are hundreds, if not thousands, of species that coexist within vernal pools and it seems impossible to predict the effects that training in the vernal pools would have upon these species, including the endangered San Diego Fairy Shrimp. Extinction, and the loss of these sensitive habitats, is forever.</p> <p>Also of special concern is the fact that the California least tern is still in decline and there seems to be little explanation as to why, and there is no species recovery plan for the terns. More information needs to be gathered about the Least Terns and the Western Snowy Plovers- especially information on how the species are doing from Oceanside all the way to the border- before making a choice about the use of the 3 shipping lanes during the breeding season.</p> <p>There seems to be little to no mention of mitigation within the current EIS, which is also concerning.</p> <p>In addition, there is no mention of returning to the current state of use should Navy training levels decrease in the future. I realize the Navy is not predicting such a reduction, but there should be a stipulation that should Navy training levels decrease in the future, that the use of the</p>	<p>The Navy is proposing to introduce limited foot traffic in some of the vernal pools at SSTC-S when they are dry. This activity is not the same as a development project that eliminates the pools completely. The 12 to 207 people entering the vernal pools each year would generally be individuals transiting through a pool on foot (e.g. on a reconnaissance mission), not large troop movements through every pool.</p> <p>The Navy will establish the baseline distribution and abundance of San Diego fairy shrimp and condition of their vernal pool habitat at SSTC-S Inland and monitor training activities to ascertain the impact of training activities on San Diego fairy shrimp distribution and abundance within the action area. The Navy will report the monitoring results and any observed incidental take to the USFWS annually, and will manage the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. The DEIS has been revised to indicate these terms and conditions.</p>

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		<p>land would revert to the way it is now, should the Navy end up going with Alternative #1.</p> <p>I compliment the Navy on their commitment to environmental stewardship. It is refreshing to see the military take such a stand for environmental integrity. It gives me hope. Ultimately, there is very little way to predict the effects that these changes would have on the WSP and the California Least Tern and until more answers are provided as to these species' progress, it seems hasty to change while these species are still making efforts to recover. A solution could be to gradually phase in these changes over the next 1-5 years and chart the progress of the endangered species. An alternative for the vernal pool training would be to conduct some training around/in a vernal pool which is in poor condition, and chart the effects (weeds, etc) of foot traffic around the vernal pools. This would also provide the Navy with time to figure out mitigation measures for the use of the vernal pools and test solutions for the inevitable problems and imbalances in the ecosystem which will result once foot traffic is allowed in the vernal pools. Thank you for reading my statement.</p>	<p>The Navy will work to avoid the pools where possible when developing training plans. The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round to the maximum extent consistent with training need.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection surveys in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The effects analyses for the Western snowy plover and California least tern have been updated in the FEIS to add an explanation of how each mitigation measure helps to conserve the species (see Section 3.12.4).</p> <p>The increase in training activities is not the only driver for the Navy's Proposed Action but also the changes in types of training and platforms, as well as a need for diversity in training. If there is a decrease in training, many of the conditions will tend towards current use because of the natural tendency of training towards training lanes 1-7 and 11-14 (vs. 8-10) as well as a natural tendency towards the developed northern area of SSTC-S (vs. the undeveloped southern areas of SSTC-S).</p>

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			The changes that the Navy proposes are not expected to occur immediately, but are expected to be phased in gradually at SSTC as the Navy implements its force structure changes nationwide. The gradual implementation of the Navy's Proposed Action, combined with its intense monitoring program, will allow the Navy and the USFWS to quickly identify changes in the population as the changes are training is implemented.
149.	Joan Van Der Hoeven	I would like to support proposed naval training enhancements along the Silver Strand coastline of San Diego. Far too many of our nations training resources are compromised because of public stupidity in purchasing residential properties in areas designated for military use. When our country is at war it is necessary for our troops to train as much as possible for safety's sake. War does not run 8-5, and there are obvious reasons why training at night or on weekends is required. The Navy has observed high standards of hazardous materials management. Beach access is available to the public in numerous alternative areas - our coastal commission assures this. The additional traffic and noise associated with Navy training for a nation at war should be regarded as an acceptable consequence for providing training that could save lives.	Your comment has been noted.
150.	Susan and Monte Weddle	We are responding to the article in the Union Tribune concerning the possible increase in the number of sorties being proposed by the navy. We sincerely hope that you will listen to our concerns. We live in Point Loma and have been greatly concerned over the increase in helicopter and fighter jet noise. The possibility of vastly increasing the number of sorties is unacceptable to us. We recognize the necessity for properly trained troops and we certainly appreciate what our troops do for us. But before you increase the level of noise and vibration in our neighborhood we would like some facts. You stated in the article that the recent number of sorties has been at 700+ in the past year. How many sorties were practiced in 2008 and 2009 Our guess and fear is that the number of sorties has been increasing continually over recent years. We certainly agree that naval troops must be properly trained, but we also want the navy to continue to be good neighbors with our community. To that end, we oppose any increase in the number of sorties in Imperial Beach, Coronado, and Point Loma.	As proposed under Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.  The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific

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			<p>Ocean.</p> <p>Helicopter noise is addressed in Sections 3.6.2.2.1 and 3.6.2.3.2 of the FEIS. The analysis of helicopter sound indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. Because of the logarithmic nature of sound; a doubling of sound energy results is only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p>
151.	Dewey Wells	My wife and I have visited your area and think the strand is very nice. However, we really think military needs (as in SEAL training) must come first. We would love for our SEALs to use the strand as much as they need to for training. Keep in mind that the military is the only reason we enjoy the freedoms we do.	Your comment has been noted.
152.	Richard Wilson	I support the Navy's expanded use of their Coronado training facilities. We must all make contributions to protect our country. Accepting some inconvenience is a reasonable contribution for the civilians of Coronado to make in support of the Navy's role in defending our county and its interests.	Your comment has been noted.
153.	Karen S. Wright	<p>I have invested a lot to improve my home. My bedroom windows overlook the Silver Strand Training center. In all those years I have enjoyed the view and the quiet occasionally the navy would use the beach for landing boats and men or for running on the beach. But until the last year or so, I haven't heard gunfire, explosions, or frequent helicopters.</p> <p>Now I understand the navy intends to increase the intrusive noise events. Intrusive noise events will destroy the peace of our neighborhood. Please reconsider and move the noisy training to camp Pendleton where there is no peaceful neighborhood to destroy.</p>	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.

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154.	Susan Yamagata	<p>I live right next to the entrance of the Training Complex. One problem that only happens when it rains is the storm drain (It makes a 90 degree turn just to the east of the guard bldg.) and it gets plugged up and is insufficient to handle the water flow. It backs up, floods and makes a small pond then runs over your entrance road.</p> <p>But, the main problem these past number of years is the speed / traffic when vehicles enter or depart the base gates. I have spoken with many of my neighbors and we have contacted the city of Imperial Beach. They have used a mobile speed detector machine on occasion. But, we would like you to consider more permanent and enforceable options. A few suggestions are:</p> <ol style="list-style-type: none"> <li>1) There is a Stop sign when exiting the base, but no one uses it. There is a speed bump when exiting the base, but anyone driving fast out of there just bottoms out a bit and continues on at a fast speed. If you would require all exiting traffic to stop at the stop sign, then cars would not be at such a high speed as they leave the base.</li> <li>2) Neighbors have suggested installing a Stop sign at Silver Strand Blvd. and Carnation Ave.</li> <li>3) Neighbors have suggested installing at least two speed bumps, maybe three along Silver Strand Blvd.</li> <li>4) Install 25 mph speed signs.</li> <li>5) Install a Pedestrian crossing that requires drivers to stop.</li> </ol> <p>Drivers race down the street, because they like to drive fast, they are late, or they are trying to beat the automatic gate when they see someone ahead of them already has the gate open. And this is specifically for my situation. I drive a small car and when I back out of my driveway, I cannot see down the street when there are cars parked in front of my neighbors. (There are usually vans, suvs, or large trucks.) If I am lucky I can see a little 2 foot opening between the vehicles and I sit and watch that opening to see if anything passes in front of it. But, lately there haven't even been any of those openings. In addition, I have to look towards the inside of the base to see if any vehicles are driving down the road to exit, because I know they will not stop at the stop sign. Then there is the driveway for Camp Surf right across the street, (they should put up stop sign also), because during their busy season their guests just pull out without looking to see if anyone is exiting the navy base. So, I am trying to monitor three different directions without having a clear view. Sometimes, the only thing I can do is look at the guard to see if he is looking down the street or getting up, because, then I know a vehicle is coming from at least one direction.</p> <p>6) I was wondering if you could install a convex mirror outside of the base that shows oncoming traffic on Silver Strand Blvd. that I would be able to use.</p> <p>I know this is not really your concern, but I am afraid with increased traffic due to your plans, the odds of me making it out of my driveway without getting hit are getting worse for me. Thank you for considering my comments on your future plans.</p>	<p>The Navy is responsible for traffic on its controlled land. Once personnel leave SSTC-S, they are subject to local jurisdiction traffic regulations. Various speed and traffic control measures are the responsibility of the City of Imperial Beach. The Navy is considering adding signage or providing a message board requesting that Navy personnel obey all posted speed limits, keep radios turned down, etc., as personnel leave the base, as the Navy does at Naval Base Coronado, Naval Amphibious Base – Coronado, and Naval Base San Diego. Signage is enforced on Navy property.</p>

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155.	Susan Yamagata	<p>I attended the Public Hearings Open House in Imperial Beach. Thank you for providing this opportunity for one-on-one discussions with representatives who could offer clarification on various topics. I spent most of my time at the Community Interests desk talking about traffic safety on Silver Strand Blvd. leading up to the entrance of the complex. They suggested that I write additional comments or suggestions. First off one of the representatives mentioned that they were uninformed about the complaints that many neighborhood residents have voiced about the speeding drag racing and problems pulling out of driveways or side streets when on-street parking blocks a clear view of oncoming traffic. Some of these problems were brought to the attention of Imperial Beach traffic control. In the past (though not for a number of years) an electronic traffic monitoring machine was placed on our street to remind drivers to slow down. I know of one time when a traffic ticket was issued but heard that it was thrown out of court as "entrapment". As part of your review, I'm guessing that you've asked the city of Imperial Beach to share any information gathered over the past seven years. I was also told that there are "warrants" that a situation must meet in order to be able to install anything from a speed limit sign to a stop sign to any other traffic control measure. Examples given were things like numbers of tickets issued, numbers of accidents, numbers of complaints, numbers of deaths. But the problem with those limitations is that after a flurry of complaints by neighbors especially about the speeding problem, nothing lasting was done to address this ongoing situation and it seemed pointless to email or call or leave another message with the City and no messages were ever responded to after calling and leaving a message at the phone number listed on the sign at the Training Complex entrance. Another problem that comes up is who has jurisdiction over street safety issues. I believe the west side of the street at Camp Surf might belong to Coronado and the rest of the street is the responsibility of Imperial Beach. It would benefit the neighborhood if all three parties including the Navy would join together to try and address residents' concerns. I have a feeling that many people who have complained about the traffic in the past have not taken part in this "Comment" opportunity. It would serve community relations if additional outreach was attempted. I suggest that you ask the city of Imperial Beach to set up the electronic message board on Silver Strand Blvd. closer to Palm Avenue so that the people coming out of the other side streets will see it. If you flashed a message: "Traffic safety issues? Please comment here or visit <a href="http://www.silverstrandtrainingcomplexeis.com">www.silverstrandtrainingcomplexeis.com</a>." And then provide a drop box and blank comment forms right next to the sign. I have seen parents with young children crossing Silver Strand Blvd. on there way to the school just around the corner. They do not always go down to the corner crosswalk, because there is a little parkway next to the El Tapatio Restaurant that is a shortcut. In my previous comments I submitted I listed "pedestrian crosswalks" (maybe like the kind with signs that are on Seacoast Drive?)</p>	<p>The Navy is responsible for traffic on its controlled land. Once personnel leave SSTC-S, they are subject to local jurisdiction traffic regulations. Various speed and traffic control measures are the responsibility of the City of Imperial Beach. Due to this and similar comments, the Navy is considering increasing signage or providing a message board requesting that Navy personnel obey all posted speed limits, keep radios turned down, etc., as personnel leave the base, as the Navy does at Naval Base Coronado, Naval Amphibious Base – Coronado, and Naval Base San Diego.</p>

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156.	Susan Yamagata	<p>Another traffic issue is pulling out onto Palm Ave. from Silver Strand Blvd. It seems that there were more street parking spots added on Palm which can cut down on visibility to see oncoming traffic. There are stop signs at 3rd and to the west on Palm Ave. at the corner of the 2nd. With planned increase in traffic for the Complex it would help if you would consider a traffic light or a three-way stop at the corner of Palm and Silver Strand Blvd. If all else fails and Silver Strand Blvd. does not meet the "warrants" to take any traffic control actions, I suggest that the Navy consider using temporary signs. In the past I have spoken to some of the trainers who work at the complex. They told me that every time a new group comes in to start training, they give a speech about speeding and other traffic do's and don'ts when traveling through this neighborhood, but that the majority of participants are young and full of fire and will on occasion disregard these warnings. Maybe at the beginning of each training period a set of temporary signs could be used on the exiting side of the street. Example: First and foremost an enforced "STOP" sign before exiting the base. Then a "25 mph" speed limit sign. Then a friendly reminder that you are driving through a "Neighborhood".</p> <p>But, the problem with this is it doesn't address cars coming into the base or problems with visibility for residents to pull out of side streets or their driveways when you're not sure how fast a car might be coming down the road. Also, if the warrants are not met for street signs etc. then maybe the Navy could install signs like those listed above on their property before the exit gate, then you wouldn't have to meet the warrants? My last suggestion is that you check the schedule for planned complex activities, then come down and sit in your car on our street and see for yourself. The street is not always busy, but traffic is heaviest in the a.m. as trainers and participants are arriving or later when leaving after a training exercise. This visit would not take into consideration the after hours traffic throughout the night or over the weekends. Thank you in advance for at least considering these issues and concerns. I'm hoping that this time some discernible action will be taken to alleviate some of the unsafe traffic situations.</p>	<p>The Navy is responsible for traffic on its controlled land. Once personnel leave SSTC-S, they are subject to local jurisdiction traffic regulations. Various speed and traffic control measures are the responsibility of the City of Imperial Beach. Due to this and similar comments, the Navy is considering increasing signage or providing a message board requesting that Navy personnel obey all posted speed limits, keep radios turned down, etc., as personnel leave the base, as the Navy does at Naval Base Coronado, Naval Amphibious Base – Coronado, and Naval Base San Diego.</p>
<b>F.2 COMMENTS FROM ORGANIZATIONS</b>			
157.	Airport Trust	<p>I represent Donald W. Rogers, Trustee of the Airport Trust, a private trust which has the proprietary interest in an exclusive license under Patent No. US 7,469,859 B1. The patent was issued on December 30, 2008 and describes an airport design having three 12,000 foot runways, a 2,000 acre footprint, two levels surrounded by water, access to the shore by underwater tubes and located in South San Diego Bay.</p> <p>Enclosed are (1) Aerial photograph of the bay with the airport superimposed; (2) Description of Proposed Airport dated February, 2010; and (3) Copy of patent.</p> <p>The site of the airport has been carefully selected to avoid interference with marine traffic, habitats, and other air traffic and is outside the amphibious base security lone.</p> <p>The trustee welcomes the expanded use of the Silver Strand provided it does not conflict with the proposed airport. At this time no conflict is apparent except amphibious operations within the bay which would involve water area within the boundaries of the airport.</p>	<p>The Navy acknowledges your concern over the area that you are suggesting for an airport. The Navy has analyzed current and proposed training activities and analyzed the cumulative impacts of these activities, which include reasonable present and future proposed activities. The Navy has not included the airport in the cumulative analysis because the timeframe and design of the proposed project is not within the reasonably foreseeable future.</p>

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		<p>The proposed airport includes a second entrance to the bay, as shown in the photograph. The advantages are discussed in the description. Such advantages include its use for military vessels. The second entrance is not essential for the proposed airport, but would have beneficial effect to the area, including environmental benefits.</p> <p>Over 50 years have been spent and recently over \$17 million in a futile effort to find an alternate airport site to Lindbergh Field which will reach its capacity circa 2020 with no room to expand with any additional runways. The proposed airport is the only feasible solution. It is requested that any expanded use be consistent with the proposed airport.</p>	
158.	California American Water	<p>I recently read in the San Diego Union-Tribune, the Monday, February 22nd edition, that the Navy is utilizing a larger amount of the property on the Silver Strand Training Complex and will be having a larger footprint of operations at that site. I would like to remind those of you responsible for this property that California American Water Company has a 16" cast iron water main that traverses the base from the south end to the north end of it. This main provides a connection between Imperial Beach and Coronado, feeding the Coronado Cays along with the Navy Base. This main was installed in 1912 and has been in continuous service since then. I would make you aware of this critical main so that you always take into consideration the location of the main when you make plans to install new infrastructure on the base. Last year at the very north end of the base there was some sort of large poly-ethylene pipeline bored from the road to the Pacific Ocean. It was bored in very near proximity to our 16" main and I believe we all dodged a bullet when that main was not damaged. Also, there are a number of vehicles parked in the same area near the fence along Hwy 75 on a day to day basis that are adjacent to two air/vacuum valves we have on the 16" main. I would hope that the vehicles never hit one of those valves and knock them off as it would create a bit of damage and cause us to shut down the 16" main which would put the base out of water and create a low pressure issue in the Coronado Cays.</p>	<p>In this EIS, the Proposed Action does not include new infrastructure. Potential for water main damage from training (a remote possibility) is a utilities / domestic water supply issue rather than a Public Health and Safety issue, and your information has been passed on to NBC Public Works Department. The NBC Public Works Department has access to and processes in place to identify and locate utilities and other important site conditions, i.e. such as but not limited to installed infrastructure, natural resources, cultural resources and more prior to any construction or site disturbance.</p>
159.	California Coastal Commission	<p>Our most significant concerns are: (1) overall increases in noise levels from the large increase in levels of training activities, and in particular, the effects of such noise on habitat and public recreation; (2) expansion of training into currently protected sensitive habitat areas, in particular: (a) least tern and snowy plover nesting areas in Boat Lanes 8-10 in STCC-North (which are currently off limits to training during the nesting season); and (b) vernal pools in STCC-South; and (3) the proposal to limit the number of plover nests to be protected to no more than 22 nests. Despite the length of the document, it remains unclear as to why these decisions have been made and how decision criteria will be analyzed to determine whether such training is needed in these areas.</p>	<p>The potential effects of the Proposed Action on the sound environment are described in Section 3.6 of the FEIS, including effects on adjacent land uses. The analysis indicates that the effects of occasional impulsive noise events from military training activities would have no effect on public use of Silver Strand State Beach or other local recreation areas.</p> <p>Given the need to train, the Navy has a robust plan for conserving vernal pool habitat and species. The Navy will use scheduling and other planning tools to avoid minimize impacts to vernal pools.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1</p>

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			<p>through 7 marked with flexi-stakes) year-round to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The degradation of habitat by noise sufficient to alter animal behavior is addressed in both 3.11 and 3.12. Helicopter noise and air turbulence is likely to result in temporary displacement of foraging least terns. Clapper rails may have disrupted communication signals and their predator detection may be disrupted as well. The effects of military noise on wildlife were reviewed by Larkin (1996). Noise affects wildlife differently from humans and the effects of noise on wildlife vary from serious to nonexistent in different species and situations. Pyrotechnics are known to result in bird dispersal</p>

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			because they are used as a tool in managing airport runways for bird-aircraft strike hazard (Blokpoel 1976). In many cases, such acoustic stimuli lose their effect as birds habituate to them (Larkin 1976). Flares and smoke are expected to have sound exposure levels of 60 to 65 decibels at 50 feet (U.S. Army 2003). A greater effect is observed in species from populations that are unstable and low in number compared to those that are relatively abundant. Long-lasting and repeated exposure could cause a bird to retreat from otherwise suitable habitat.
160.	California Coastal Commission	The Navy has narrowly construed the available alternatives being considered, in terms of those brought forth in the final analysis. The extensive increases in loud activities warrants serious consideration of conducting at least some of them, including the more intrusive ones, in less heavily populated areas, for both social and resource protection reasons. If the Navy does proceed as proposed, it will need to provide a more detailed and compelling explanation to establish that there are no available less damaging alternatives. We understand the concept of keeping training near the home base, but given that Camp Pendleton is within the same county, a clearer explanation is needed for dismissal of use of this site for the activities proposed in sensitive areas. Stating it is rejected based on the need to "achieve training tempo requirements" does not provide the reviewer with any information with which to assess this assertion.	As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.
161.	California Coastal Commission	We understand that decision-criteria were used and are listed in the DEIS (on page 2-1). However the analysis explaining why the criteria are applied in certain situations (e.g., a statement on page 2-2 is that relocating some activities to STCC-S would conflict with criteria 2 and 6) is not provided. Also, we note that page ES-5 states the Navy bases its need projections on models of future exercises. While we inherently support and understand the Navy's need to train, without the modeling assumptions and additional information, it is difficult to weigh future training needs against environmental and social impacts.	A new explanation of criteria has been added to Section 2.1.2 in the EIS and an explanation of the logistics and transportation hurdles present in moving training activities has been added to Section 2.1.3.2.

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162.	California Coastal Commission	<p>Given that the Navy is proposing a significant expansion of training, which will increase conflicts with habitat protection, it would appear that listed species such as snowy plovers and least terns warrant increased protection, whereas the DEIS appears to be proposing simply to maintain the status quo (at least with respect to the number of snowy plover nests). We would argue that the increase in activities in Boat Lanes 1-7 would seem to make it all the more imperative that these species have an area set aside (during the nesting season) and left undisturbed.</p>	<p>The Navy has proactively prepared for the expected take through actions taken prior to this request for take. Preparation includes site enhancement, management of lane usage, nest protection, and monitoring, and decades of adaptive management. Snowy plover nests are not necessarily going to be taken, but no more than 22 proposed nests would be protected. In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1) and the western snowy plover (Section 3.12.3.2) to provide a more in-depth analysis of impacts that training is expected to have on the species. Additional mitigation measures have been added to the Proposed Action. The benefits of current and proposed mitigation measures are also described and quantified as far as practicable. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. The Navy works each year on site-maintenance and monitoring, plus periodic site enhancement or management approaches to manage terns, and to increase the attractiveness of Delta beaches. The FEIS has been updated (Section 3.12.3.1) to explain the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs and chicks prior to and after all military training exercises, to allow assessment of take associated with training activities.</p>

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163.	California Coastal Commission	<p>Alternatives eliminated from further consideration include training at locations other than the STCC. It is not clear why proposed training in Boat Lanes 8-10 during the nesting season, which the Navy estimates (based on its models) to occur approximately 24 times/year, could not be relocated to Camp Pendleton, or why Camp Pendleton beaches could not "provide a realistic training environment that simulates real world littoral combat conditions."</p> <p>The criteria provided by the Navy (DEIS, page 2-34) indicate these Boat Lanes would be used either: (a) when other suitable lanes are occupied, or (b) "if [lane] attributes make them more suitable for meeting training needs than other available training lanes." Examples of such attributes include beach topographic conditions, distance from other training locations, and a need for diversity in training locations. These criteria appear overly broad, and we believe there should be a much greater burden needing to be satisfied before the Navy would use these lanes. We question why, for example, if the Navy is able to modify beach topography for the purpose of attempting to discourage nesting in heavily trained areas, the Navy is not also able to modify beach topography to provide desired training condition topography in other areas (and thereby avoid Lanes 8-10 during the nesting season). If feasible, such an alternative should be explored for both Camp Pendleton beaches, as well as the remaining Boat Lanes at the STCC. If infeasible, the Navy should explain why.</p>	<p>Under current training conditions, Navy training officers are notified of the locations of the nests and buffers, and plan their training activities to avoid entering the buffer areas. A few training activities, such as individual basic physical fitness activities, may be able to work around the training buffers. These activities incorporate identifying and avoiding plover nest buffer areas into the activity. Other training does not require use of beach areas, and thus would not be affected by the presence of plovers. Most other activities however, are unable to operate around the buffers. The buffers are artifacts on the beach that do not occur in real world wartime situations, and thus adversely affect the value of training (e.g., presence of the plover nests restrict flexibility for maneuvering across the beach and inhibit real-time, tactical decision-making. Personnel may habituate to worrying about avoiding stakes, even while they are fighting at war. Restrictions imposed by stakes during training may lead to habitual avoidance measures and self-imposed concentrations of personnel, even in a combat environment, due to repetitious training with staked boundaries. Personnel may also focus on the stakes and no-go areas rather than learning their training mission). Activities involving heavy equipment and vessels require large unconstrained maneuvering space without encumbrances, precluding areas with buffered plover nests. To accommodate training requirements for these activities, the activities are often shifted in their entirety to the north or south, away from the buffers, so that personnel/equipment will not encounter the buffers/stakes. Under current conditions, this approach is feasible. Where needed, training activities can and are moved to other available training lanes that are free of plover nests or contain a maximum of two plover nests at one time. Historically, SSTC has typically had less than 22 maximum active nests at one time.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility</p>

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			<p>of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible. The Navy considered creating an avoidance cap of more than 22 concurrent western snowy plover nests, but found that approach could render lane(s) unusable. Twenty-two concurrent nests would translate into approximately two concurrent nests in each viable lane on SSTC (i.e., 14 training lanes excluding Lanes 1, 5, and 6, which have not historically had nests due to the shallow beach and hummocks). If plover nests increase, buffering each nest will constrain the available beach area such that the beach will not adequately support military readiness training activities. Two nests per training lane at the same time by themselves could encumber 60 meters of the 500 meter beach lane width (12 percent). If the nests happen to be spaced closely together and/or close to the edge of the lane, the area in between the nests or between the nests and the edge of the lane may also become unusable for training (e.g., if there are 100 m between the nests and 50 m between the nests and the edge of the lane, then approximately 40 percent of the lane could be rendered unusable). Snowy plovers are not colony breeders, and prefer to distance their nesting activities as far as they can from other nesting plovers. As such, plover nests are more likely to be evenly spaced and encumber larger, rather than smaller sections of the training beach. Also, as discussed above, many training activities require that an additional buffer be provided away from the staked buffers to ensure that the stakes are not visible or an encumbrance to personnel being trained. Adding a third nest could render the entire lane unusable. With the anticipated increase in training tempo of the SSTC training beaches (see Sections 1.5.1.1 and 3.12.3.1), training activities may not be able to be moved to other less encumbered beach lanes like they can be and are under current conditions.</p>

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			<p>There will not necessarily be more nests in Lanes 8-10. If the plovers increased their nesting activities in Lanes 8, 9, and 10, activities that were scheduled for these lanes would need to be shifted to another lane. If all the lanes were occupied, then the activity would need to be shifted to a lane with another activity, and that lane would need to be free of buffered nests or have a maximum of one buffered nest.</p>
164.	California Coastal Commission	<p>The Navy's stated argument for eliminating the alternative of protecting all the snowy plover nests, rather than limiting protection to only 22 nests, is not well explained. Stating a third nest in a given training lane "could render the entire lane unusable" appears speculative, depending on the location of the nests. We would like historic information about conflicts the Navy has experienced in training in these lanes over, say, the past decade. For example, how often have there been more than two active plover nests within a given lane, and what has this meant for Navy training? Has the Navy had to cancel, modify, or relocate training? Is it a given that more than two active nests in a lane at one time makes the lane unusable? If so, please explain. Wouldn't the location of the nests (including proximity to each other, as well as to nests in other lanes) have an important bearing on this question? Has the Navy been able to successfully train in a lane when nests have exceeded two in that lane?</p> <p>In addition, if there were greater numbers of nests, but most of those were in Lanes 8-10, which the Navy indicates would be used sparingly, then would it not be easier to protect more than 22 nests? Also, it is not clear how the number 22 was derived, when there are 14 Boat Lanes. If the number was derived from the number of lanes times two nests/lane, shouldn't that total be 28 nests?</p>	<p>Under current training conditions, Navy training officers are notified of the location of the nests/buffers, and plan their training activities to avoid entering the buffer areas. A few training activities, such as individual basic physical fitness activities, may be able to work around the training buffers. These activities incorporate identifying and avoiding plover nest buffer areas into the activity. Other training does not require use of beach areas, and thus would not be affected by the presence of plovers. Most other activities however, are unable to operate around the buffers. The buffers are artifacts on the beach that do not occur in real world wartime situations, and thus adversely affect the value of training (e.g., presence of the plover nests restrict flexibility for maneuvering across the beach and inhibit real-time, tactical decision-making. Restrictions imposed by stakes during training may lead to habitual avoidance measures and self-imposed concentrations of personnel, even in a combat environment, due to repetitious training with staked boundaries. Personnel may also focus on the stakes and no-go areas rather than learning their training</p>

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			<p>mission). Activities involving heavy equipment and vessels require large unconstrained maneuvering space without encumbrances, precluding areas with buffered plover nests. To accommodate training requirements for these activities, the activities are often shifted in their entirety to the north or south, away from the buffers, so that personnel/equipment will not encounter the buffers/stakes. Under current conditions, this approach is feasible. Where needed, training activities can and are moved to other available training lanes that are free of plover nests or contain a maximum of two plover nests at one time. SSTC has historically typically had less than 22 active nests, at most, at one time.</p> <p>The Navy considered creating an avoidance cap of more than 22 concurrent western snowy plover nests, but found that approach could render lane(s) unusable. Twenty-two concurrent nests would translate into approximately two concurrent nests in each viable lane on SSTC (i.e., 14 training lanes excluding Lanes 1, 5, and 6, which have not historically had nests due to the shallow beach and hummocks). If plover nests increase, buffering each nest will constrain the available beach area such that the beach will not adequately support military readiness training activities. Two nests per training lane at the same time by themselves could encumber 60 meters of the 500 meter beach lane width (12 percent). If the nests happen to be spaced closely together and/or close to the edge of the lane, the area in between the nests or between the nests and the edge of the lane may also become unusable for training (e.g., if there are 100 meters between the nests and 50 meters between the nests and the edge of the lane, then approximately 40 percent of the lane could be rendered unusable). Snowy plovers are not colony breeders, and prefer to distance their nesting activities as far as they can from other nesting plovers. As such, plover nests are more likely to be evenly spaced and encumber larger, rather than smaller sections of the training beach. Also, as discussed above, many training activities require that an additional buffer be provided</p>

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			<p>away from the staked buffers to ensure that the stakes are not visible or an encumbrance to personnel being trained. Adding a third nest could render the entire lane unusable. With the anticipated increase in training tempo of the SSTC training beaches (see Sections 1.5.1.1 and 3.12.3.1), training activities may not be able to be moved to other less encumbered beach lanes like they can be and are under current conditions. There will not necessarily be more nests in Lanes 8-10. If the plovers increased their nesting activities in Lanes 8, 9, and 10, activities that were scheduled for these lanes would need to be shifted to another lane. If all the lanes were occupied, then the activity would need to be shifted to a lane with another activity, and that lane would need to be free of buffered nests or have a maximum of one buffered nest.</p>
165.	California Coastal Commission	<p>It is also not clear from the document how the Navy intends to phase in the increased numbers of activities. If the timing of the increases allows sensitive areas proposed for training to be off limits for several years (or some other period) until they are needed, that should be considered as an alternative as well, or at least explained. We recognize that the Navy states these areas will not be used unless needed, but it would be helpful to understand the pace of the proposed increases.</p> <p>We have similar concerns over the proposal to expand training to allow foot traffic in vernal pools. The DEIS does not make a compelling case that these pools could not be avoided. At a minimum, it is not clear why fencing (and thereby avoidance) of at least the smaller vernal pools could not be conducted consistent with training needs.</p>	<p>Information has been added to the FEIS indicating the "natural" phase in of activities. By their nature, all activities will not begin at the same time, rather they are spread temporally. Therefore, the phase in period of all these activities will therefore occur over a longer period of time.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the</p>

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			<p>EIS remain at the low levels expected. The Plan will include focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>Finally, the vernal pools are not considered part of the Coastal Zone.</p>
166.	California Coastal Commission	<p>It appears from the discussion in several sections of the DEIS that the primary reason for dogs on the beach is for their exercise, and the primary training activities necessitating dog use occur at or near buildings (i.e., away from beaches and sensitive areas). We understand that the dogs are trained not to disturb wildlife, but wildlife may still be intimidated by dogs to the extent they could abandon nesting areas, especially in the cumulative context of overall increases in training levels. Is there a reason, for example, why dog runs could not be excluded from Boat Lanes 8-10 during the nesting season, with their exercise limited to other areas?</p>	<p>Military working dogs are highly trained and under constant voice or leash control of the handler. While effects of recreational dogs in nesting areas are documented in scientific literature, the effects of leashed dogs that are highly trained in obedience and avoidance of wildlife in an area that is heavily used for military training is not yet known. Dogs need to be able to run on the beach rather than on harder paved surfaces to protect their sensitive pads. Repeated long distances on hard surfaces will wear down their pads. The dogs need to be able to train on a full 10-kilometer loop on an infrequent basis to ensure that they have long distance training as well as speed training. As part of the consultation with USFWS, the Navy is proposing a study to assess impacts of military working dogs on California least terns and western snowy plover nesting, such that potential effects can be better understood.</p>

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167.	California Coastal Commission	<p>Page 3.6-24 states that loud activities would occur infrequently at night or on weekends. Can the Navy provide an estimate of the amount of proposed increases in loud noise-producing activities on weekends, holidays, and at night?</p> <p>The reference on page 3.6-25 to noise mitigation (referring to Section 3.6.2) is presumably meant to be a reference to Section 3.6.1.6. Also, that section is rather vague. We would appreciate it if the Navy would spell out in greater detail how noise effects on sensitive species and on recreation will be factored into decisions on locating and timing training.</p>	<p>Given the variability of training schedules, it is difficult to reliably predict the extent to which various types of training activities could be conducted at night, on weekends, or on holidays. Most training activities occur during the day on weekdays, as noted in the FEIS. The reference on page 3.6-25 correctly refers to Current Mitigation Measures in Section 3.6.2. Airborne noise effects on sensitive species are addressed in Section 3.11 (Terrestrial Biology), and Section 3.12 (Birds) of the FEIS. Noise effects on recreation are addressed in FEIS Section 3.6; Silver Strand State Beach is specifically addressed as a nearby sensitive receptor.</p>
168.	California Coastal Commission	<p>Page 3.9-12 discusses marine mammal monitoring during underwater detonations and pile driving. The discussion should describe how much training the marine mammal observers will receive. Also, we will want to be added to the list of entities contacted in the event of an observed marine mammal injury. We will also want to receive any monitoring reports on snowy plover, least tern, and/or vernal pool habitat impacts that the Navy may be providing to the U.S. Fish and Wildlife Service.</p>	<p>The Navy provides biological monitoring reports and marine mammal strike reports to the appropriate federal agencies.</p> <p>Observers are trained to determine the presence or absence of marine mammals. Due to the low density of marine mammals in the area and shallow waters of SSTC, the expected animals in the area are dolphins and pinnipeds.</p>
169.	California Coastal Commission	<p>Page 3.1-15 references a new activity affecting public access, referenced as N14. New activities are only numbered N1-N11, so this may be a typo. Please identify this activity.</p>	<p>The Activities in question are now listed as N9 and N11 in Section 3.1.2.3.2 of the FEIS.</p>
170.	California Coastal Commission	<p>Page 3.12-26, Fig. 3.12-11, contains a graph showing plover nesting through 2008. Does the Navy have 2009 data for snowy plover nest numbers? If so, please provide, for all the sites shown in Fig. 3.12-11. Also, are there any plover nests yet this year? Please keep us apprised of current nest numbers and locations as the season progresses.</p>	<p>The 2009 data have been added to the figure for snowy plover and the figure for least terns.</p>

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171.	California Coastal Commission	The City of Coronado's comments on the DEIS (Item No. 27) state that the ferry service to NASNI has been discontinued. As this service was, in part, mitigation for traffic impacts from the homeporting of nuclear aircraft carriers, please update us on the status of the ferry service.	Your comment addresses an issue that is outside the scope of this EIS. The SSTC EIS only looks at cumulative impacts from the increase of personnel and traffic from the homeporting of nuclear carriers within San Diego Bay. Specific mitigation within the CVN homeporting EIS was not discussed within the SSTC EIS. However, Naval Base Coronado has established a commuter working group comprised of the selected base personnel, city of Coronado, CALTRANS, Metropolitan Transit System, and others to explore both short and long term actions to enhance, restore, or add to the suite of on-going and past transportation incentive programs, e.g. van pools, car pools, bus ridership, and or bay ferry service pick up points.
172.	California Coastal Commission	Page 3.7-44 contains an error message.	This error message has been corrected in the FEIS
173.	California Department of Fish and Game	The Navy addresses potential short term and cumulative impacts and impact minimization measures, to some extent, from the proposed increases in Navy training activities. However, the Navy does not sufficiently address monitoring, avoidance and habitat compensation for sensitive, rare and unique biological areas. Additionally, potential increases in recreational human and dog disturbances within the ocean side training ranges, expected increased impacts to listed birds by predation, increases in future projects and expected sea level rise due to global climate change have not been fully analyzed for cumulative impacts.	<p>Monitoring, avoidance, and habitat compensation for sensitive, rare, and unique biological areas are described in Sections 3.11 and 3.12. Additional mitigation measures for potential impacts of proposed activities are listed at the end of these respective sections, as well as in Section 5.</p> <p>As indicated in the USFWS Biological Opinion and described in the FEIS, the Navy will improve the delineation of base boundaries to facilitate improved enforcement in these areas to reduce potential impacts of human and dog disturbances. This will include the installation of improved signage, k-rails, and a guard shack. At SSTC-N, temporary barriers and improved signage will be used to more clearly notify the public of the Navy's exclusive use of SSTC-N beach and existing restrictions on public usage of those beaches.</p> <p>Climate change is addressed in Section 4 of the FEIS as a cumulative impact on the public and the environment to which the Proposed Action would make an insignificant contribution. Because the purpose of the EIS is to address the effects of the Proposed Action on the public and the environment, rather than on itself, the effects of sea level rise on the Proposed Action are not addressed in the FEIS. While sea level rise was</p>

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			<p>not specifically addressed, the proposed training activities do not require any fixed facilities that would require protection or relocation. The primary effect of sea level rise on Navy training activities on SSTC would be a decrease in the width of the training beaches. Ground access to the beaches and local weather conditions might also be affected.</p> <p>To address recreation user concerns, the Navy is considering increased signage as a result of this and other public comments received. The Navy will delineate the boundary of SSTC-S that parallels the mean high tide line in a manner that does not encumber training exercises.</p>
174.	California Department of Fish and Game	<p>Biological Impacts and Mitigation Strategies</p> <p>Increasing repetitive Navy training activities along with decreasing existing conservation measures may cause long term impacts and significantly add to cumulative impacts to terrestrial and marine species and their habitats. The Department has the following comments, concerns, and recommendations: 1) the FEIS should more fully analyze and address the potential cumulative or long term coastal ecosystem impacts associated with each phase and type of the proposed increased training/construction; 2) the FEIS should include additional studies and/or increased biological monitoring, additional conservation measures, and mitigation plans for the potential long term impacts to listed and sensitive terrestrial and marine species, rare and unique coastal strand habitat, and State- and federally-listed marine birds and their nesting habitat. 3) the Department views the Navy's proposed mitigation and decreases in avoidance and minimization measures for sensitive or listed species and the sensitive coastal strand, dune and eelgrass habitats, as insufficient protection and compensation from cumulative impacts.</p>	<p>The individual effects analyses of military activities (short-term and long-term) are presented in their respective sections, where the potential impacts are discussed in more detail. The determinations of the impacts of military activities are also presented there. The cumulative impacts section discusses the impact on the environment which results from the incremental impact of the military training activities when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. The discussion of applicable impacts from the respective sections have been carried forward into the cumulative impacts discussion.</p>
175.	California Department of Fish and Game	<p>1) Cumulative or Long Term Impacts not fully Addressed in the DEIS:</p> <p>The FEIS should address the potential for the following types of impacts and show how they will be avoided, minimized, mitigated and monitored for SSTC North and South and Bayside Training Ranges as applicable:</p> <p>During bird nesting and California grunion (<i>Leuresthes tenuis</i>) spawning season the fully protected and state and federally endangered California least tern (<i>Sterna antillarum brownii</i>) and the California species of special concern and federally threatened Western snowy plover (<i>Charadrius alexandrinus nivosus</i>) as well as other sensitive bird species and their habitats may potentially be impacted due to the proposed significant increases in vehicle, air and foot/dog traffic in the intertidal and upland areas of SSTC-North and South and bayside. A proposed buffer zone limiting bird nesting distribution and a proposal to eliminate sensitive habitat markers is described in the DEIS and indicates that the Integrated Natural Resources Management Plan (INRMP) for this area has been revised recently to support such a proposal.</p>	<p>The 2002 INRMP for Naval Base Coronado is being revised, and will be consistent with the analysis and conclusions of this FEIS.</p> <p>The individual effects analyses of military activities (short-term and long-term) are presented in their individual sections, where the potential impacts are discussed in more detail. The determinations of the impacts of military activities are also presented there. The cumulative impacts section discusses the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such</p>

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		The Department was not aware that the Coronado INRMP (2002) was revised recently to support and accommodate a reduction in bird conservation. Additionally, the biological resource discussion does not clearly identify an analysis on how these sensitive species could potentially be affected due to cumulative impacts.	other actions. The applicable impact analyses from the Environmental Consequence sections have been carried forward into the cumulative impacts discussion.
176.	California Department of Fish and Game	After near shore disturbances, (training activities and construction), an increase in opportunistic, non-native, terrestrial and marine species may be seen within the project vicinity. An increase in non-native species would cause increased disturbance of ecosystem processes and decreased native biodiversity. This may be due to spreading/dispersal of non-native species during construction or from non-native species aggressively taking advantage of a newly disturbed area.	The Navy conducts annual surveys and treatments for invasive plants, and will be expanding treatment of iceplant in the near future. A vegetation management plan under development to support terns and plovers also benefits sensitive plant species. Focused rare plant management includes <i>Phacelia stellaris</i> , <i>Dudleya variegata</i> , among other rare plants that are less locally abundant on Silver Strand. Additionally, the Navy conducts surveys for <i>Caulerpa taxifolia</i> , and invasive non-native marine algae for all construction projects, and introductions of non-native marine fish and invertebrates are highly unlikely because neither ballast water nor equipment is transported to SSTC without cleaning and inspection.
177.	California Department of Fish and Game	Significant and repetitive vehicle, helicopter, and detonation impacts to terrestrial and marine biological resources, including sensitive and listed birds, may occur at the site causing cumulative impacts. Some of these effects may include the destruction of marine plants and algal species and their substrate such as surf grass, eelgrass and kelp species. Vehicle impacts from driving in the intertidal and on the beach may cause impacts to the kelp wrack on the beach used for forage and shelter by various terrestrial and marine species, including western snowy plovers that feed primarily on terrestrial and aquatic invertebrates (brine flies, brine fly larvae and brine shrimp). Significant burial or destruction of fish and their habitat from detonations may also occur at scattered rock bottom habitats that are found immediately offshore of the project site, thus reducing the prey base for California least terns that feed primarily on small fish. Vehicles may also impact active California least tern, western snowy plover and other listed and sensitive bird eggs, chicks and nests. Helicopters flying over actively-nesting California least terns and western snowy plovers may flush adults off the nest and leave the eggs and chicks vulnerable to predation.	The individual effects analyses of military activities (short-term and long-term) are presented in their individual sections, where the potential impacts are discussed in detail. The determinations of the impacts of military activities are also presented there. The cumulative impacts section discusses the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. The applicable impact analyses from the Environmental Consequence sections have been carried forward into the cumulative impacts discussion.
178.	California Department of Fish and Game	Coastal strand habitat is an important and diminishing California natural resource and supports a unique ecological community (Dugan and Hubbard 2009). The DEIS does not discuss the impacts to biodiversity and the uniqueness, importance and sensitivity of strand habitat nor how it should be conserved due to proposed increase in impacts.	Terrestrial habitats are discussed and analyzed in Section 3.11 of the FEIS. Mitigation and monitoring plans discussed in representative resource sections discuss conservation methods under the Action Alternatives.

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179.	California Department of Fish and Game	Significant fragmentation of marine and onshore habitats may occur due to the proposed increase in training activities and detonations in the intertidal, subtidal and upland. This may cause a reduction in habitat suitable for native species distribution especially as it relates to eelgrass on the bayside training range and onshore sensitive bird breeding, roosting, and foraging habitat.	The individual effects analyses of military activities (short-term and long-term) are presented in their individual sections, where the potential impacts are discussed in detail. The determinations of the impacts of military activities are also presented there. The cumulative impacts section discusses the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. The applicable impact analyses from the Environmental Consequence sections have been carried forward into the cumulative impacts discussion. Potential impacts on or fragmentation of marine and offshore habitats is unlikely based on the temporal and spatial frequency of physical disturbance from wind and wave action along SSTC offshore beaches, relative to the Proposed Action. Detonations only occur underwater in the oceanside boat lanes (with the exception of Shock Wave Generator , which occurs in bayside training area Echo). Underwater detonations were evaluated in Section 3.7.2.2.2 of the FEIS for all benthic invertebrates. Impacts to eelgrass habitat within the bay are addressed within the current analysis and mitigation measures are identified. Furthermore potential impacts to sensitive bird species are already monitored by the Navy, and SSTC birds have displayed positive trends compared to similar areas within California. Moreover, the restriction of public access from portions of SSTC beaches likely benefits coastal dune and upland habitat continuity to a greater degree than intermittent training activities cause fragmentation. Habitat conversation remains a focused effort of Navy natural resource personnel.

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180.	California Department of Fish and Game	There are known Pismo clam, <i>Tiveta sfultorum</i> , beds near SSTC-North and South training ranges that are surveyed by the Department every year. Invertebrates are an important part of near shore and beach ecology. In particular, Pismo clams, a state managed and sensitive species, tend to develop high concentrations or beds on flat beaches in the surf zone and at the mouths of bays, rivers and estuaries. This makes them more susceptible to Navy vehicle training, detonations or burial impacts. Impacts to Pismo clams, as well as other concentrations of marine invertebrate species, should be identified, monitored and mitigated. The DEIS should have addressed the potential for these types of impacts.	During the analysis of potential impacts to benthic infauna, various clam species were assessed for impacts, as described in Section 3.7.2.2 of the FEIS. The best available data for SSTC training beaches were used, and impacts to invertebrates and subtidal habitats have been discussed. Impacts of training activities taking place within the washzone habitat above the Mean Low Water mark were determined to have a low potential for eliciting adverse effects to marine benthic infauna. Additionally, underwater detonations were evaluated in 3.7.2.2.2 of the FEIS for all benthic invertebrates.
181.	California Department of Fish and Game	Sea level rise should be analyzed and addressed in the FEIS as a potential cumulative impact to unique and dwindling coastal strand habitat, eelgrass habitat and bird nesting habitat on beaches in southern California.	Climate change is addressed in Section 4 of the FEIS as a cumulative impact on the public and the environment to which the Proposed Action would make an insignificant contribution. Because the purpose of the EIS is to address the effects of the Proposed Action on the public and the environment, the effects of sea level rise on the Proposed Action are not addressed in the FEIS. While sea level rise was not specifically addressed, the proposed training activities do not require any fixed facilities that would require protection or relocation. The primary effect of sea level rise on Navy training activities on SSTC would be a decrease in the width of the training beaches. Ground access to the beaches and local weather conditions might also be affected.
182.	California Department of Fish and Game	2) Concerns and Recommendations related to Potential Cumulative and Long term Impacts: Since the property leased by the Navy at SSTC-North is state-owned property and SSTC-South and bayside is adjacent to Silver Strand State Beach, the Department expects that a higher level of adherence to standard practices, as well as proposing additional mitigation and conservation measures for protecting sensitive coastal ecosystems and biological communities, will be practiced by the Navy as the tenant and neighbor of such land. The following comments and recommendations should be considered and addressed in the FEIS:	Sensitive coastal ecosystems are delineated by the Navy as part of assessing snowy plover and California least tern nesting habitat. Standard practices related to construction and training activities regularly create avoidance areas focused on minimizing long-term impacts and reducing cumulative effects.

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183.	California Department of Fish and Game	Mitigation for 1.13 acres of eelgrass habitat loss is proposed in the DEIS based on Navy estimates. An enhanced monitoring and surveying program is recommended for the remaining eelgrass habitat that may be adversely affected before, during and after the proposed training activities and construction. The Department is concerned that the actual impacts to eelgrass and eelgrass habitat in this area may be significantly higher at the bayside Navy training range due to cumulative or long term impacts of proposed increased training.	Besides the Navy Eelgrass Mitigation Sites, the Navy maintains permanent eelgrass monitoring transects in San Diego Bay that are monitored every year (Figure 3.7-9). Bay wide mapping of eelgrass density classes is conducted every three to five years in a joint Navy-Port of San Diego effort (1994, 1999/2000, 2004, and 2008). The most current (2008) data were recently made available (DoN, 2009). This monitoring program allows the Navy to track fluctuations in the coverage, extent, and health of eelgrass in San Diego Bay.
184.	California Department of Fish and Game	Monitoring plans that incorporate adaptive management for developing marine wildlife and habitat conservation measures are recommended. Monitoring plans should be developed in collaboration with the resource agencies. Experienced and qualified independent biologists should be retained to adequately implement the biological monitoring and studies.	Monitoring plans and existing mitigation measures are presented in sections 3.7 through 3.12 of the FEIS, as well as an independent chapter in Section 5. These mitigation and monitoring plans have been created with the assistance of and in consultation with resource agencies such as National Oceanic and Atmospheric Administration and U.S. Fish and Wildlife Service.
185.	California Department of Fish and Game	The Department recommends marking and avoiding all western snowy plover and California least tern nests and any suitable nesting habitat to offset impacts to these species that may occur as a result of the disturbances and activities (e.g., foot and vehicle traffic) associated with military training exercises.	<p>The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that do not encumber training activities. Such a marking strategy would provide visual references identifying sensitive nesting areas and may entail signage affixed to existing beach lane signposts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>As indicated in the USFWS Biological Opinion and described in the FEIS, the Navy will improve the delineation of base boundaries to facilitate improved enforcement in these areas. This measure will include the installation of improved signage, k-rails, and a guard shack. At SSTC-N, temporary barriers and improved signage will be used to more clearly notify the public of the Navy's exclusive use of SSTC-N beaches and existing restrictions on public use of those beaches. Please see FEIS Section 2.1.3.7 for a detailed explanation of why more than 22 concurrent western snowy plover nests would impede proposed military training at SSTC. Restrictions imposed by</p>

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			<p>stakes during training may lead to habitual avoidance measures and self-imposed concentrations of personnel, even in a combat environment, due to repetitious training with excessively staked boundaries. Personnel may habituate to worrying about avoiding stakes, even while they are fighting at war. Personnel may also focus on the stakes and no-go areas rather than learning their training mission. Historically, SSTC has typically had less than 22 maximum active nests at one time. With the anticipated increase in training tempo of the SSTC training beaches (see Sections 1.5.1.1 and 3.12.3.1), training activities may not be able to be moved to other less encumbered beach lanes like they can be under current conditions.</p>
186.	California Department of Fish and Game	Existing buffer zones and signs to designate sensitive habitat (e.g., for California least tern and western snowy plover) should continue and be increased in the future for the proposed training increases on State property.	<p>Under current training conditions, Navy training officers are notified of the locations of the nests and buffers, and plan their training activities to avoid entering the buffer areas. A few training activities, such as individual basic physical fitness activities, may be able to work around the training buffers. These activities incorporate identifying and avoiding plover nest buffer areas into the activity. Other training does not require use of beach areas, and thus would not be affected by the presence of plovers. Most other activities however, are unable to operate around the buffers. The buffers are artifacts on the beach that do not occur in real world wartime situations, and thus adversely affect the value of training (e.g., presence of the plover nests restricts flexibility for maneuvering across the beach and inhibits real-time, tactical decision-making). Activities involving heavy equipment and vessels require large, unconstrained maneuvering space, precluding the use of areas with buffered plover nests. To accommodate training requirements for these activities, the activities are often shifted to the north or south, far enough away from the buffers so that personnel and equipment will not encounter or see the buffers and stakes. Under current conditions, this approach is feasible. Where needed, training activities can and are moved to other available training lanes that are free of plover nests or contain</p>

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			<p>a maximum of two plover nests at one time.</p> <p>The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy would provide visual references to identify sensitive nesting areas, and may entail signage affixed to existing beach lane signposts and a limited number of additional markers, as determined to be appropriate by Navy staff.</p>
187.	California Department of Fish and Game	<p>The project should include a vehicle route plan that sufficiently avoids and minimizes impacts to sensitive species and habitats. The vehicle route plan should include, but not be limited to, the following areas: a) pismo clam beds and grunion nests; b) identified sensitive bird breeding, roosting, and foraging habitat and other significant biological areas of the intertidal, strand, and dunes; and c) beach wrack and eelgrass.</p>	<p>Under current training conditions, Navy training officers are notified of the locations of the nests and buffers, and plan their training activities to avoid entering the buffer areas. Vehicle use that could adversely affect Pismo clam beds are constrained to large amphibious vehicles accessing beach slopes within training lanes from nearshore waters. Because of the variability of the proposed training activities, and based on the temporal and spatial variability of clam beds as well as grunion spawning areas, an excessive amount of monitoring would be required to develop avoidance areas. SSTC beaches are high-energy, physically disturbed environments that incur dynamic change with respect to wave action and sand movement on both weekly and seasonal bases. Potential impacts of training activities on infaunal species such as clams and benthic invertebrates would be difficult to measure and would not affect foraging avian fauna or fish.</p> <p>As a result of the Essential Fish Habitat consultation with NMFS, The Navy will conduct April to May pre-event surveys for grunion prior to SSTC training events that could to disturb intertidal beach areas (Causeway Pier Insertion and Retraction training (max. of 10 per year), and ELCAS (max. of four per year). For events that have a requirement to occur in April and May, the Navy will use predicted grunion spawning periods obtained from the California Department of Fish and Game (<a href="http://www.dfg.ca.gov/marine/grunionschedule.asp">http://www.dfg.ca.gov/marine/grunionschedule.asp</a>) to anticipate times to survey 10-14 days prior to the next ELCAS</p>

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			<p>or Causeway Pier Insertion and Retraction. This survey will identify if grunion spawning occurred or did not occur on the beach area scheduled for training. If grunion spawning is documented, then a determination on the spatial extent of spawn across the planned training area and magnitude of spawning will be made. For cases in which a significant spawning run is observed coincidental with and at the same location as a planning training event, the Navy will make every attempt possible to laterally shift the training to avoid the deposited grunion eggs to the best extent practical.</p>
188.	California Department of Fish and Game	<p>Helicopters flying over actively-nesting California least terns and western snowy plovers should stay at least 500 feet above the ground to avoid flushing adults off the nest and leaving the eggs and chicks vulnerable to predation.</p>	<p>California least terns have persisted, nested, and their populations expanded parallel to Navy activities for many years. Currently California least terns nest on the runway at Naval Base Coronado, where supersonic jets takeoff and land regularly. This is a high ambient noise environment in which nesting persists. The Navy has nesting success adjacent to the North Island airfield, which is a very high noise environment. Western snowy plovers have not been documented to flush from occupied nests during aviation operations, and western snowy plover's typically move only a short distance on the ground when not directly disturbed by ground based activities. The FEIS addresses noise and its effects on the least tern and snowy plover.</p> <p>The mixture of civilian, military, and commercial aviation makes for complex airspace traffic patterns and procedures. The NBC Commanding Officer has established air operations course rules for Naval Air Station North Island and the Naval Outlying Landing Field (NOLF, note - formerly known as Ream Field) to conduct safe required training and operational flights while minimizing impacts on the surrounding community. These course rules are designed to promote safe air operations, meet Navy aviation training requirements, and protect communities beneath established flight paths. Pilots are given annual course rule briefs to ensure their familiarity with course rules, procedures, and noise abatement measures.</p>

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			<p>Currently published air operation instructions (course rules) advise pilots when departing NOLF westward to either fly 1/4 mile south of beach houses or cross over beach houses at or above 800 feet above mean sea level (300 feet above the Federal Aviation Administration’s minimums set in Federal Aviation Regulation 14 CFR Part 91, see reference below) until they are near the communication station (old Navy Radio Receiver Facility). Weather conditions, other aircraft in the flight patterns, etc. can and do affect the aircraft’s flight route and altitude. Federal Aviation Regulation 14 CFR, Part 91 Section 119, titled <i>Minimum Safe Altitudes</i>, Paragraph d indicates that helicopters may be operated at less than the following minimums prescribed for other aircraft, e.g. over congested areas, 1000 feet above the highest obstacle within a horizontal radius of 2000 feet of the aircraft, and over other than congested areas 500 feet above the surface. Helicopters in SSTC training primarily support offshore training and , when involved with SSTC-S inland training, are not permitted to hover over beaches but may transit over the beach at altitudes less than 500 feet altitude as required by the training curriculum.</p>
189.	California Department of Fish and Game	<p>To assess impacts of training activities on the California least tern and western snowy plover, the Department recommends annual documentation of the distribution of California least terns and western snowy plovers at SSTC-N in relation to the timing, number, type, and distribution of training activities in each training lane during the breeding seasons for these sensitive species.</p>	<p>As indicated in the USFWS Biological Opinion (July 7, 2010). the Navy will include the following information in the yearly reports to be submitted to the USFWS in conjunction with the Proposed Action: a) the numbers and distributions of terns and plovers observed in each training lane; b) the numbers of any dead or injured least terns or snowy plovers (including eggs, chicks or adults) observed in each training lane; c) the hatching rates of terns and plovers in each beach lane; d) maps of the locations of tern and plover roosts within the action area; e) the timing and number of training events within the southern 3 beach lanes, and other beach lanes, to the extent available; f) the date and condition of any dead or injured tern or plover; and d) any measures taken to prevent additional tern or plover death or injury. The Navy will ensure that biological monitors look for and document the locations of least tern or</p>

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			snowy plover nests, eggs, and chicks prior to and after all military training exercises, to allow for assessment of the take associated with training activities.
190.	California Department of Fish and Game	The Department recommends increased enforcement of civilian and non-training trespass at SSTC-N to reduce impacts to the California least tern and western snowy plover.	As indicated in the USFWS Biological Opinion and described in the FEIS, the Navy will improve the delineation of base boundaries to facilitate improved enforcement in these areas. This delineation will include the installation of improved signage, k-rails, and a guard shack. At SSTC-N, temporary barriers and improved signage will be used to more clearly notify the public of the Navy's exclusive use of SSTC-N beaches and existing restrictions on public use of those beaches.
191.	California Department of Fish and Game	The Department recommends that the FEIS address the potential occurrence of Pacific pocket mouse and coast horned lizard, and the potential for long-term conservation of these species on-site.	<p>A survey for the Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>) was performed at SSTC-S in 2002 using USFWS trapping protocol (USFWS 2000). It was not detected. Four transects were completed on-site within vegetation communities that exhibited suitable sandy soil conditions. Surveyors reported that the species is not expected to occur at SSTC-S due to lack of suitable habitat (RECON 2004). The Navy will continue to survey for this species during future biological inventories. Due to possible future training requirements, it is the Navy's position that Threatened and Endangered species not be experimentally introduced to unoccupied habitat.</p> <p>A survey for the coast horned lizard (<i>Phrynosoma coronatum blainvillii</i>) was also performed at SSTC-S in 2001-2002 (RECON 2004). It was not detected, and the surveyors attributed this result to a lack of suitable habitat. The survey assessed the remnant coastal sage scrub patches, and found them to be too small to support a population of this species,</p>

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			and no native harvester ant forage ( <i>Pogonomyrmex</i> sp.) was found.
192.	California Department of Fish and Game	<p>Grunion season monitoring and avoidance/minimization strategies should include but are not limited to the following:</p> <p>a. When grunion monitoring surveys indicate grunion habitat exists on site, and significant grunion runs are seen, avoid sand disturbing activities during the grunion spawning season. The Grunion spawning season is typically March 1st to August 31st.</p> <p>b. If avoiding the grunion spawning season is not feasible, then the Department recommends development of spawning and egg avoidance, minimization and monitoring plans for significant spawning events on site.</p> <p>c. Predicted grunion spawning runs should be monitored prior to, during and post training or construction by a qualified grunion biologist.</p> <p>d. Avoid sand disturbing activities in the intertidal areas during the two-week incubation period after significant spawning runs are seen. Subsequent monitoring should also indicate that no additional spawning has occurred before proceeding with sand disturbing activities. Identifying and marking grunion nests and use of buffer zones is another avoidance option.</p> <p>e. In order to determine significant grunion spawning on the beach, monitoring plans should generally include four nights of monitoring with the first night being the night of the new or full moon. At least two hours of monitoring, the first day to begin after the peak high tide and the 2nd, 3rd and 4th days of monitoring should begin at least one-half hour before peak high tide. Two hundred grunion or more seen over the four day predicted spawning run beginning with the night of the new or full moon should be sufficient to indicate significant spawning activity.</p>	<p>Beaches from Zuniga Jetty to the Mexican border, including SSTC training areas, are potential grunion habitat. Considering the temporal and spatial variability of local populations, in conjunction with their dependence on moon phases and tidal cycles during spawning, the potential for adverse impacts from dispersed training activities was considered to be extremely low. As a result of the EFH consultation with the NMFS, the Navy will conduct a new bottom habitat mapping survey to more accurately detail potential habitat types (ex., sand, cobble, rocks) within the oceanside SSTC boat lanes. This effort, scheduled to begin in 2011, is designed to update bottom type classification at finer resolution and spatial scales than previous California State funded surveys from 2002. The goal of this Navy funded survey would be to provide information to NMFS on habitat types within SSTC, and to Navy commands conducting underwater detonations at SSTC for consideration in selection of appropriate bottom-laid detonation sites.</p> <p>The Navy will conduct April - May surveys for grunion prior to SSTC training events that could to disturb intertidal beach areas. For events that are required to occur in April and May, the Navy will use predicted grunion spawning periods obtained from the California Department of Fish and Game (<a href="http://www.dfg.ca.gov/marine/grunionschedule.asp">http://www.dfg.ca.gov/marine/grunionschedule.asp</a>) to anticipate times to survey 10-14 days prior to the next ELCAS or Causeway Pier Insertion and Retraction. This survey will identify if grunion spawning occurred or did not occur on the beach scheduled for training. If grunion spawning is documented, then a determination on the spatial extent of spawn across the planned training area and magnitude of spawning (on the standard grunion 0-5 spawning scale) will be</p>

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			made. For cases in which a substantial spawning run is observed (4 or 5 on the spawning scale) coincidental with and at the same location as a planning training event, the Navy will attempt to laterally shift the training to avoid the deposited grunion eggs to the greatest extent practical. If such a shift cannot be made due to schedule conflict over multiple SSTC boat and beach lanes, logistic requirements to use a specific lane or area within a lane that precludes a shift, or safety considerations (ex., weather conditions, sea state), then the Navy will inform NMFS Southwest Region that training was conducted on that site for the specified reason.
193.	California Department of Fish and Game	3) Conservation Planning for Future Impacts to Listed and sensitive Marine and Terrestrial Species and their Habitats. The Department recommends that existing methods and criteria to designate species buffer zones and sensitive habitat should be revised to provide adequate fish and wildlife protection in order to accommodate the Navy's future proposed activities on and adjacent to state property located at SSTC-North and South and the Bayside. Such proposals should be approved by the resources agencies.	Please see response to other portions of your letter (above) for a discussion of buffers with respect to federally listed birds. With implementation of the Proposed Action, losses in California least terns and western snowy plover nesting are expected to be minimally increased from baseline levels. The Navy and U.S. Fish and Wildlife Service (USFWS) have established mitigation measures to compensate for these losses. The Navy has consulted with the USFWS under Section 7 of ESA for the Proposed Action, and received a Biological Opinion.  The NBC Integrated Natural Resources Management Plan is a venue in which the Department may partner with the Navy in developing further management strategies.
194.	California State Parks	California State Parks (CSP) appreciates the U.S. Department of the Navy (Navy)'s commitment to resource conservation in the southern San Diego region. This commitment is particularly evident with respect to conservation of California least tern and Western snowy plover. CSP appreciates the effort put into the Silver Strand Training Complex Draft Environmental Impact Statement (Draft EIS), including its documentation of our region's natural and cultural heritage and its review of the complex responsibilities charged to the Navy. CSP has several concerns with the proposed project with respect to sensitive species conservation, adequate mitigation for impacts to sensitive species, lack of specificity concerning increased presence of emissions and hazardous materials, and potential impacts to marine life within the adjacent off-shore property that is considered part of Silver Strand State Beach. This letter also includes comments on cultural resources for lands adjacent to park holdings, and questions the effects of increased ground and air traffic on the experience of visitors at Silver Strand State Beach.	Figures and text have been updated with "Silver Strand Natural Preserve". The document recognizes the SSNP and the extent of the offshore boundaries.  Regarding ownership of boat lanes 3-10, the Navy recognizes that California owns the fee in the tide and submerged lands from the 1941 Mean High Tide Line out to three nautical miles and that the California State Lands Commission administers and controls this land, subject to a lease to the United States and a reversion in State Parks. The reversion to State Parks is effective upon the expiration or earlier termination of the 1982 lease. The term of the 1982 lease is 40 years – or until August

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		<p>The Draft EIS proposes:</p> <ul style="list-style-type: none"> <li>• the continuation of current training and test and evaluation activities conducted within the study area;</li> <li>• an increase in training tempo from baseline conditions and additions to types of training;</li> <li>• the carrying out of existing, routine training at additional locations within SSTC established training areas;</li> <li>• the introduction of new platforms and equipment;</li> <li>• increased access and availability to existing beach and inland training areas.</li> </ul> <p>Noted in section 3.1.1.5.2 SSTC-N Surrounding Land Use, and elsewhere throughout the document, the text and figures incorrectly refer to "Silver Strand State Park", instead of the correct title of "Silver Strand State Beach". In addition, the document omits recognition of the Silver Strand Natural Preserve. A Natural Preserve is a CA State land designation used to identify the presence of highly significant natural resources. CSP feels that the Draft EIS should include specific mention of this land designation and also, where appropriate, denote its boundaries in figures within the document. Similarly, the Draft EIS should note the extent of marine area managed by CSP. California State Parks holds fee title to off-shore lands, 3 miles out, that include, roughly, boat lanes 3 through boat lane 10 and extends to the southern end of Silver Strand State Beach. CSP should be both considered and listed as an "affected jurisdiction" on the EIS Cover Sheet, and throughout the document as a whole.</p>	<p>31, 2021. Regarding ownership of boat lanes 3-10, the Navy has a determinable fee in the submerged lands from the Mean High Tide Line out to three nautical miles, subject to a reversion in the State of California if the lands are no longer needed for government purposes, which expires in August 31, 2021.</p> <p>The Navy, as a federal agency, analyzes the potential environmental impacts of its proposed actions under NEPA. CEQA applies to the discretionary actions of California State public agencies. The actions proposed within this EIS require no new leases of land from the State; and there are no other anticipated State or local agency discretionary actions that would trigger a CEQA review. However, if a real estate action, such as a lease, is determined to be in the best interests of the Navy and the State, the State may be required to conduct a CEQA review of the lease agreement. If the State needs to conduct a CEQA analysis, the Final EIS may be referenced in the State's CEQA analysis.</p> <p>Under the Commerce Clause, Article 1, Section 8 of the U.S. Constitution, the federal government is conferred a "dominant servitude" over navigable waters and the underlying land. Exercise by the federal government of this Constitutional power is not an invasion of any property rights in the water or underlying lands and is not a taking of property within the meaning of the Fifth Amendment. None of the actions proposed below the ordinary high water mark create permanent fixtures or permanent attachments to the underlying land. It is the Navy's position that the federal actions proposed in this EIS create no obligation to enter into real estate leases or agreements with the State owners of lands underlying these navigable waters.</p>

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195.	California State Parks	<p>CA State Parks understands that the Navy must allow for a significant level of flexibility when forecasting training needs, however we also feel that take of endangered species should be avoided or mitigated appropriately. The proposed expanded use of the training grounds, especially Beach Blue 2, Beach Orange 1, and Beach Orange 2, will most likely result in take of California least tern and Western snowy plover, and deter and disrupt current levels of nesting. CSP feels that the proposed mitigation for this take offered in the Draft EIS is inadequate to meet the standards of the U.S. and California State Endangered Species legislation. The Draft EIS lacks specificity with respect to training activities to adequately quantify potential take of protected species. Therefore, identification of an appropriate mitigation agreement prior to project implementation is difficult. Although options exist for additional on-site mitigation and avoidance, and those options should be further explored, we offer the following suggestions for a potential off-site mitigation scenario:</p> <ol style="list-style-type: none"> <li>1. Commit to increased level of avian monitoring necessary to accurately quantify take of tern and plover resulting from the proposed actions in the Draft EIS.</li> <li>2. Continue consultations with USFWS to develop an adaptive management agreement in which take of tern and plover is appropriately mitigated through suitable actions. Based on the success the U.S. Navy has had with the establishment of the 75-acre preserve at Delta North and South, it seems that a similar mitigation scenario could offer the appropriate long-term mitigation. Opportunities exist in the region for creation of additional off-site nesting locations.</li> </ol> <p>It is the understanding of CSP that the Navy's current Western snowy plover avoidance protocol involves the buffering of each snowy plover nest that is located during the breeding season. The Draft EIS proposes to reduce this management action such that only 22 concurrent plover nests are buffered. This proposed decrease in avoidance measures, when coupled with the proposed increase in training, presents a management scenario in which take of Western snowy plover, above current levels of take, seems likely. The Draft EIS does not appear to include adequate mitigation for this increased take of Western snowy plover.</p>	<p>With implementation of the Proposed Action, losses in California least terns and western snowy plover nesting are expected to be minimally increased from baseline levels. The Navy and U.S. Fish and Wildlife Service have established mitigation measures to compensate for these losses. The Navy has consulted with the U.S. Fish and Wildlife Service under Section 7 of ESA for the Proposed Action, and received a Biological Opinion on July 7, 2010.</p> <p>In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1) and the western snowy plover (Section 3.12.3.2) to provide a more in-depth analysis of impacts that training is expected to have on the species. Additional analyses have been provided on the indirect and direct impacts of current and proposed military training, to include both an average anticipated impact as well as a high-intensity anticipated impact. Additional mitigation measures have been incorporated into the Proposed Action. The benefits of current and proposed mitigation are also described and quantified to the extent practicable. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. The Navy has consulted with the USFWS, and received a Biological Opinion for take of the listed species associated with military training.</p> <p>The FEIS addresses the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year.</p> <p>As described in the FEIS and the U.S. Fish and Wildlife Service Biological Opinion, the Navy will implement a mitigation measure to schedule training in areas where less nesting occurs when possible and still meet training needs. In addition, the Navy will schedule training activities that could be conducted on the hardpacked portion of the beach during low tides when it is consistent with training needs. The Navy</p>

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			<p>will develop a marking strategy to delineate least tern and snowy plover nesting areas that do not encumber training activities. Such a marking strategy may entail signage affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff. The Navy will include the following information in the yearly reports to be submitted to the U.S. Fish and Wildlife Service under the proposed action: a) the numbers and distributions of terns and plovers observed in each training lane; b) the numbers of any dead or injured least terns or snowy plovers (including eggs, chicks or adults) observed in each training lane; c) the hatching rates of terns and plovers in each beach lane; d) maps of the locations of tern and plover roosts within the action area; e) the timing and number of training events within the southern three beach lanes, and other beach lanes, to the extent available; f) the date and condition of any dead or injured tern or plover; and d) any measures taken to prevent additional tern or plover death or injury. The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs, and chicks prior to and after all military training exercises, to allow the assessment of take associated with training activities.</p> <p>Finally, the Navy's Proposed Action includes: ongoing nesting site preparation at the Delta Beaches; predator management; population monitoring; a Long Term Habitat Enhancement Plan; and measures to eliminate unauthorized recreational trespass, which are all conservation measures that support the recovery of the least tern. The Navy expects implementation of these conservation measures to maintain the suitability of least tern habitat within the action area over the long term. The Navy's actions will increase the capacity of oceanside beaches and the Delta beaches to accommodate least terns and snowy plovers.</p>

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196.	California State Parks	<p>CSP ownership at Silver Strand State Beach extends 3 miles out to sea. This off-shore portion of Silver Strand State Beach generally includes Boat Lanes 3 through 10 and is adjacent to Boat Lane 11, which immediately borders Silver Strand SB to the south. The EIS fails to adequately consider the effects on this area or proposed appropriate mitigation of its actions. This area was created to ensure the public's continued enjoyment of the coastal marine environment. It is the Navy's responsibility, as part of the EIS, to delineate this state ownership and to evaluate the EIS proposals' potential effects on the public's use of this off-shore area.</p> <p>In addition, the 3-mile marine area is eligible to be designated as a State Marine Protected Area. While CSP appreciates the consideration of marine life already included within the Navy's protocol for disruptions to the under-water acoustic environment we are concerned that existing activity and increases proposed in the Draft EIS will result in additional harm to marine life that use waters managed by CSP. CSP requests that activities involving acoustic disturbances known to damage marine life (pile driving, underwater detonations, SWAG operations, blasts, pyrotechnics, etc.) be located at distances far enough from ocean waters managed by CSP such that impacts to resources within these waters are avoided.</p>	<p>Regarding ownership of boat lanes 3-10, the Navy recognizes that California owns the fee in the tidal and submerged lands from the 1941 Mean High Tide Line out to three nautical miles and that the California State Lands Commission administers and controls this land, subject to a lease to the United States and a reversion in State Parks. The reversion to State Parks is effective upon the expiration or earlier termination on the 1982 lease. The term of the 1982 lease is 40 years – or until August 31, 2021. The Navy has submitted a Coastal Consistency Determination to the California Coastal Commission and received a conditional concurrence from the Commission.</p> <p>The analysis in Section 3.1 – Land Use, analyzes the public lands on all borders of the range complex. SSSB and the SSNP are part of the public lands that surround SSTC, and the public would be able to continue to use public beach adjacent to active training.</p> <p>The Navy has analyzed all marine communities located offshore and nearshore from SSSB and SSNP in Section 3.7.2.2 of the SSTC EIS, and has also submitted an Essential Fish Habitat assessment to NMFS. The conclusions reached in the EIS and the Essential Fish Habitat assessment indicate that effects are temporary and localized, and without impact to overall biotic assemblages.</p> <p>The current locations of White and Purple lanes reflect the locations of these lanes as portrayed on NOAA Chart 18772. No Navy records have been found that identify when the lanes were designated. The locations of these lanes can be corrected by submitting a request to NOAA with corrected latitudes and longitudes. However, the Navy does not conduct amphibious training activities on the State Beach portion on this boat lane.</p>

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197.	California State Parks	<p>Current and increased naval activity in SSTC South, particularly in Beach White 1 and Beach White 2, may result in disturbance to Western snowy plover dependent upon protected habitat within the adjacent Silver Strand Natural Preserve, managed by CSP. CSP requests that the Navy inform CSP staff of training activities in this region such that CSP staff can accurately monitor potential impacts from these adjacent land uses. If negative effects are documented, CSP requests that the Navy work with CSP and USFWS to mitigate these negative effects.</p>	<p>The Navy has consulted with the USFWS, and has received a Biological Opinion (signed July 7, 2010) for take of the listed species associated with military training; the BO includes appropriate avoidance, minimization, and mitigation measures. The Navy will not add CSP to the list of entities that are alerted when training activities are anticipated because the Navy has consulted with the USFWS on take and appropriate minimization, avoidance and mitigation measures. The Navy’s consultation has also identified appropriate monitoring for the species, which is detailed in Section 3.12 of the FEIS.</p> <p>As part of the conditions of the Biological Opinion, appropriate monitoring for the species was identified. The Navy will include the following information in the yearly reports to be submitted to the USFWS under the proposed project: a) the numbers and distributions of terns and plovers observed in each training lane; b) the number of any dead or injured least terns or snowy plovers (including eggs, chicks or adults) observed in each training lane; c) the hatching rates of terns and plovers in each beach lane; d) maps of the locations of tern and plover roosts within the action area; e) the timing and number of training events within the southern three beach lanes, and other beach lanes, to the extent available; f) the date and condition of any dead or injured tern or plover; and d) any measures taken to prevent additional tern or plover death or injury. The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs, and chicks prior to and after all military training exercises, to allow the assessment of take associated with training activities.</p>

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198.	California State Parks	<p>CSP appreciates the Navy's assistance with the clean-up of expended materials that occasionally wash to shore on SSSB and the SSNP. CSP is concerned that some of the activities proposed in the Draft EIS will result in additional occurrences of munitions constituents and other expended materials on the public beaches managed by CSP. CSP requests that the Navy continue this cooperation and allow for increased communications and response for clean-up of future expended materials found on SSSB and SSNP. Additionally, CSP requests that Navy staff work with CSP interpretive staff to identify interpretation needs and public education and outreach necessary to protect the visiting public and CSP staff from these potential dangers.</p>	<p>Most of the training materials used at SSTC are non-hazardous, or are rendered non-hazardous when they function as designed (e.g., blanks). Trainees collect and remove expended materials to the extent practicable at the conclusion of their training events. Very rarely, energetic training munitions may not function as designed, resulting in their temporary presence until promptly retrieved by Navy personnel. The incidence rate of expended items that would pose a risk to the public is so low that a public education and outreach program is not warranted.</p>

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199.	California State Parks	<p>CSP is concerned that the activities proposed in the Draft EIS will result in Naval activity (training exercises, aircraft fly-over, beach landings, traversing from SSTC North and SSTC South, etc.) on or over SSSB and SSNP. CSP is a public safety agency and as such is committed to protecting the resources and visitor experience on these beaches. CSP requests that any desired increased use of CSP-managed lands be approved by the CSP San Diego Coast District Superintendent prior to initiation.</p>	<p>The only activities that occur on SSSB or SSNP are physical training activities which include running and swimming. The physical activities performed in this area are the same as those done by the public. No landings, aircraft overflights, or other high-intensity activities use these two areas.</p> <p>The Navy appreciates CSP’s dedication to maintaining public safety and a positive experience for visitors to SSSB and SSNP. As cooperative neighbors, the Navy intends to maintain the same respect for SSSB and SSNP lands as for Navy-owned or leased lands. The only activities that occur on SSSB or SSNP are physical training activities which include running and swimming.</p> <p>The Navy has a determinable fee in the submerged lands from the Mean High Tide Line out to three nautical miles subject to a reversion in the State of California if the lands are no longer needed for government purposes, which expires in August 31, 2021.</p> <p>Additionally, the Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. In light of this proximity, the Navy has developed mitigation measures for activities that may cause an impact to the environment or the surrounding area, and has presented these measures in the EIS.</p>

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200.	California State Parks	<p>The natural landform and habitat present within SSTC South is extremely unique and regionally rare. The Draft EIS proposes increased impacts to this valuable resource but fails to propose adequate mitigation. The proposed training in the vernal pools exemplifies this oversight. Every effort should be made to protect the vernal pool resources and other unique habitat elements found in SSTC South. Proposed activity within the vernal pools when dry has the potential to disrupt the soil integrity and the long-term sustainability of this habitat, the plant life and the San Diego fairy shrimp that occupy this niche. If the Navy must increase training within the sensitive habitats of SSTC South, the impacts should be quantified and appropriate mitigation measures should be undertaken.</p>	<p>The Navy will use scheduling and other planning tools to minimize impacts to vernal pools. The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>

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201.	California State Parks	<p>Table 3.3-4, "Operational Emissions at SSTC and Portions of NASNI with Evaluation of Conformity" reports emissions increases of monitored pollutants at levels anticipated to be up to nearly 4 times the 'No Alternative' emissions estimation. Additionally, the Draft EIS mentions hazardous air pollutants (HAP's) but provides inadequate data for assessment of the current level of HAP's emitted by Naval activities and anticipated proposed increases. Given these proposed increases, and the apparent lack of data on HAP's, CSP feels that the Navy should increase its commitment to monitoring and reporting air pollutants throughout the region to all affected jurisdictions. Specific attention should be directed toward supplementing existing monitoring protocols with sampling stations and efforts that allow the Navy to identify the contribution of Naval-generated emissions, including HAP's, long-term, and to mitigate appropriately when necessary.</p>	<p>The Navy has a comprehensive air quality management program that includes monitoring and mitigation for Naval-generated emissions, including HAPs. Mitigation measures that are part of the Navy's air quality management practices are implemented at SSTC. Aircraft, marine vessels, ground vehicles, and military equipment are well-maintained, and meet applicable air emission standards (such as smog certification for on-road vehicles) in accordance with State requirements. Section 3.3 and Appendix C analyze the pollutant emissions from the training activities presented in the EIS and indicate that the emissions from all training activities are within air quality standards.</p>
202.	California State Parks	<p>The Draft EIS contains a fairly extensive write-up on the policies, plans and regulations that govern the management of hazardous materials at SSTC however, given the relatively short public review period, an adequate review of these reference materials was not possible. The Draft EIS does note that, under the Preferred Alternative, the amounts of expended training materials would increase, the weight of expended flare and smoke canister residues would increase and the amounts of residues from detonations of underwater explosives would increase. The EIS would benefit from a more specific discussion of the updated offshore petroleum discharge system (ES9). CSP is concerned with the health of the environment for the park visitors, State Park staff, local public, and the sensitive natural resources living in this region. Review of this section would be facilitated by the inclusion of data from studies that have evaluated levels of hazardous materials in the local environment with particular inclusion of effects on sensitive receptors. CSP feels that, with the proposed increases in expended materials, the Navy should clearly outline and commit to a testing and evaluation protocol designed to identify the degree to which hazardous materials may not be emitted through the SSTC operations, and the levels at which they are accumulating in the local environment. Additionally the Draft EIR states that the Navy submits EPCRA 312, Tier 'II forms to the emergency responders (Fed Fire) and the San Diego County Certified Unified Program Agency (CUPA), and the EPCRA 313 Toxic Release Inventory (TRI) Form R to USEPA, with courtesy copies to the California Environmental Protection Agency (CalEPA) and the Regional Water Quality Control Board. CSP feels that we would benefit from updated knowledge on this subject and requests that these forms be submitted to the Peace Officer Lifeguard staff stationed at Silver Strand State Beach.</p>	<p>The comment cites the Executive Summary (page ES-9) in requesting a more specific discussion of the Offshore Petroleum Discharge System; that discussion is found in Section 2.2.2 and Table 2-1 of the EIS. The comment postulates that "studies that have evaluated levels of hazardous materials in the local environment" exist that have not been incorporated into the FEIS; the Navy believes that relevant studies and local data have been considered in its analysis. The comment requests a testing program, the need for which has not been established in the FEIS. Finally, the commenter requests copies of the Toxic Release Inventory for NAB Coronado, which are available from the CUPA or USEPA.</p> <p>While the SSTC FEIS discusses a cumulative increase in the quantity of smoke grenades and flares used in training events, the increase is quantified in terms of individual grenades and flares, and not necessarily the small quantities of potentially hazardous substances. There will be little direct use of smoke grenades and flares directly in or over water. Use per training event in which smoke and flares apply is also small (2-11 items). In addition, this use is spaced out both in time and space throughout the year and at various locations within SSTC, so there are no hot spots of air pollutants on the ranges.</p>

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			<p>Smoke grenade filler has approximately 11 ounces of a colored smoke mixture (white, red, yellow, green and violet). The smoke is composed of a mixture of potassium chlorate, sodium bicarbonate, lactose, and a dye, all of which have—in the amounts or quantities specified in the EIS—no significant environment effect. In addition, most of the filler is consumed during use. Chemical composition of military flares can be a combination of magnesium, boron, potassium perchlorate, and barium chromate (USAF 1994), or in some cases red phosphorus. Red phosphorus is a common ignition compound used for instance in matches. Red phosphorus is a relatively non-toxicity compound although highly flammable, and subject to environmental degradation in marine systems (Spanggard et al. 1985, EFRB 2010). In an analysis of military flares, the US Air Force found that most of the common flare constituents were consumed during flare ignition. Residual ash from flares contained small quantities of magnesium and boron (USAF 1994). Measured values of magnesium in flare ash [86 part per million (ppm)] were found to be below the natural seawater composition of magnesium (1290 ppm).</p> <p>Potassium perchlorate was not a significant residue and was not detected in ash samples measured. In the rare instance that any perchlorate were to remain, perchlorates are also highly soluble, and the ions have a limited tendency to interact with other dissolved chemical species or to adsorb to aquifer materials under typical environmental conditions (Clausen et al 2007). Perchlorate in marine aquatic systems is subject to substantial bacterial degradation (Urbansky 1998, Logan et al. 2001, Brown and Gu 2006, Petrisor 2006, Wilkin et al. 2007).</p> <p>Therefore, given the limited, short-term potential for smoke grenade and flare residuals to fall into San Diego Bay and the ocean, the relatively low levels of constituents actually released, and natural environmental degradation of these compounds, the relative risk from use of these items is not</p>

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			<p>substantial.</p> <p>A comparison to related pyrotechnics with substantially more constituents can be made within the San Diego region. For example, the San Diego Regional Water Quality Control Board required water and sediment monitoring by Sea World due to daily firework displays over Mission Bay. On average, Sea World conducts 100-120 shows per year, with each show using up to 250 shells, and up to 1,750 shells for special holidays (SDRWQCB 2007). In support of a the concern for potential environmental contamination from fireworks residue, water and sediment samples were taken from 2001 through 2006 as part of a Coastal Commission permit requirement. Samples were analyzed for various constituents found in fireworks, including oxidizers (ammonium perchlorate and potassium perchlorate), metals (antimony, barium, copper, strontium), and salts (magnesium, sodium, etc.). The final monitoring report concluded that there were no substantial spatial or temporal patterns in concentrations of critical metals in sea water or sediments in the small area of Mission Bay subject to repeated large scale fireworks displays (SDRWQCB 2007)</p> <p>Under the No Action Alternative, SSTC training activities require the detonation of small amounts of explosives on the water surface and underwater. While up to 1,610 pounds of explosives are used each year for underwater detonations (Table 3.5-7), the majority of these training events occur on the open ocean side of SSTC.</p> <p>As discussed in Section 3.4.2.1.1 through 3.4.2.1.3, high-order combustion of typical military explosives used at SSTC, such as Royal Demolition Explosive (RDX) and pentaerythritol tetranitrate (PETN), consumes over 99.997 percent of the original explosive material. Major detonation by-products consist of common inert gases and relatively inert inorganic salts. For example, exploding 10 pounds of Composition (C)-</p>

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			<p>4, which is 91 percent RDX, produces about 3.7 pounds of nitrogen, 25 pounds of carbon dioxide (CO<sub>2</sub>), 1.6 pounds of water, 1.8 pounds of carbon monoxide, 0.2 pound of ethane, 0.03 pound of hydrogen, 0.02 pound of propane, 0.09 pound of ammonia, and 0.02 pound of methane. The major products of combustion-nitrogen, CO<sub>2</sub>, and water-are all common natural components of the atmosphere and water. Any explosive residue (&lt;0.003 percent) would be relatively insignificant, and would be either quickly dispersed by local ocean currents (Section 3.5.1.3.4) or buried in ocean sediments. Field studies conducted by the US Army indicate that explosives residue includes 0.003 percent or less of the original quantity of material detonated, although the amounts of explosives residues vary among different types of ordnance. Land-based studies show that, for large ordnance items such as bombs, high-order detonations may spread residual particles in the micron and submicron-sized range over hundreds of square meters. However, individual quantities of explosives used at SSTC are substantially smaller than those tested by the Army, which means smaller amounts of the original detonation materials and less explosive velocity. In addition, SSTC explosive events occur in water rather than on land, and would be subject to substantially less dispersion due to the non-compressibility of water. Given the nature of training events at SSTC, low order detonations, while possible, are not the desired training outcome and any remnants are retrieved to the greatest extent practical to diagnose what may have caused the low-order detonation.</p> <p>The environmental fate and effect of military munitions constituents, including RDX, have been the subject of a number of scientific studies to determine if these compounds represent a risk in the marine environment, including water and sediment (Hawari 2000, Belden et al. 2005, Lotufo and Lydy 2005, Houston and Lotufo 2005, Rosen and Lotufo 2005, Juhasz and Naidu 2007, Rosen and Lotufo 2007a, 2007b, Boyd et al. 2008, Monteil-Rivera et al. 2008, Mukhi et</p>

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			<p>al. 2008, Weber 2008, Lotufo et al. 2009, Lotufo et al. 2010, Rosen and Lotufo 2010, Zhao et al. 2010).</p> <p>As a compound in the environment, RDX is subject to natural processes in marine systems that break down (i.e., degrade) the parent molecule to inert nitrogen compounds. Processes include hydrolysis in marine water, photodegradation from light, uptake and metabolism from marine plants, and bacterial degradation in water and sediment (Hawari 2000, Juhasz and Naidu 2007, Boyd et al. 2008, Monteil-Rivera et al. 2008, Lotufo et al. 2009, Weber 2008, Zhao et al. 2010). Based on both laboratory toxicity testing and more realistic environmental exposure scenarios, RDX has also shown low to no toxicity and no potential for bioaccumulation in a variety of marine species, including amphipods, mussels, and fish (Belden et al. 2005, Lotufo and Lydy 2005, Houston and Lotufo 2005, Rosen and Lotufo 2005, Rosen and Lotufo 2007a, 2007b, Mukhi et al. 2008, Lotufo et al. 2009, Lotufo et al. 2010, Rosen and Lotufo 2010).</p> <p>Therefore, based on the limited amounts of explosive residues actual deposited during SSTC training events, dispersion and natural degradation of any small amounts of residue, and limited toxicity to marine organisms, the overall effect on the environment of in-water explosives use would be insignificant.</p>

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203.	California State Parks	<p>The Draft EIS does not include an adequate assessment of the potential negative effects of increased activities, especially amphibious and beach activities, on spawning success of the California grunion. This species is largely endemic to Southern California and requires undisturbed natural intertidal sandy beach habitat. The Navy manages a significant portion of this species remaining suitable spawning habitat. Potential negative effects to this species should be quantified, avoided when possible, and mitigated when necessary.</p>	<p>The analysis presented in the EIS indicates that the impacts to the intertidal zone would be minimal, as this is a dynamic energy environment, and any affects in the intertidal zone would be temporary and localized. Considering the limited draft of the vehicles that would be making landings through the intertidal zone, in conjunction with the steep slope of the beach throughout the SSTC-N and SSTC-S, bottom disturbance would be limited and not expected to adversely impact fish habitat.</p>
204.	California State Parks	<p>Given the level of detail for specific training schedules provided in the Draft EIS, it is also difficult to assess the long-term impacts of the proposed increased activities on rare and special-status plant species occurring within the SSTC (<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>, <i>Astragalus tener</i> var. <i>titi</i>, and others listed in Table 3.11-2). CSP shares conservation responsibility with many of these resources and is committed to providing high quality habitat for the successful persistence of these species. CSP feels that the proposed activities in the Draft EIS have the potential to result in significant negative population level effects for these special-status and rare plants. Suggested additional mitigation measures for rare and special-status plants found in the SSTC may include such actions as:</p> <ol style="list-style-type: none"> <li>1. Annual population-level surveys that quantify various impacts from increased training activity;</li> <li>2. Commitment to a regional rare plant conservation program in which unavoidable impacts resulting from increased training activities are mitigated through off-site restoration and enhancement. Contribution toward a special status and rare plant conservation seed-bank should also be explored;</li> <li>3. Further consideration and implementation of on-site special-status and rare plant preserves and protected conservation areas.</li> </ol> <p>Section 3.11 should address the potential occurrence of Pacific pocket mouse, and the applicability of SSTC South as a viable habitat for long-term conservation of this species.</p>	<p>The <i>Cordylanthus</i> does not occur in the Navy action area - it occurs at YMCA Camp Surf and it is managed and monitored jointly by the Navy and the YMCA at that location for its protection. The dune-dwelling <i>Astragalus tener</i> var. <i>titi</i> has not been seen on the Silver Strand for many years, and is presumed to be extirpated from southern California. Upland rare plants can be locally relatively abundant, and benefit from the Navy's program of annual invasive species control and monitoring. Some benefit occurs through restoration that primarily involves weed control, but sometimes appropriate special status plants are incorporated into restoration efforts. Avoidance and minimization measures are implemented at the Delta beaches for plants identified as rare by California Native Plant Society as List 1B or higher. The Navy conducts annual surveys and treatment for invasive plants, and in recent years has been expanding treatment of iceplant. A vegetation management plan is under development to support least terns and snowy plovers, and this will incidentally benefit rare plant species. Focused rare plant management and annual monitoring includes <i>Phacelia stellaris</i>, <i>Dudleya variegata</i>, among other rare plants that are less locally abundant on Silver Strand, or are known to be at risk from disturbance. Finally,</p>

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		Section 3.11 should address coast horned lizard presence and conservation.	<p>the Navy avoids impacts to rare species through its site approval process under NEPA.</p> <p>The Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>) was surveyed for at SSTC-S in 2002 using a USFWS trapping protocol (USFWS 2000). The mouse was not detected. Four transects were surveyed on-site within vegetation communities that exhibited suitable sandy soil conditions. Surveyors reported that the species is not expected to occur at SSTC-S due to a lack of suitable habitat (RECON 2004). The Navy will continue to survey for this species during future biological inventories. Due to possible future training requirements, it is the Navy's position that Threatened and Endangered species not be experimentally introduced to unoccupied habitat.</p> <p>The coast horned lizard (<i>Phrynosoma coronatum blainvillii</i>) was also surveyed for at SSTC-S in 2001-2002 (RECON 2004). It was not detected and the surveyors attributed this to a lack of suitable habitat. They assessed the remnant coastal sage scrub patches to be too small to support a population of this species, and no native harvester ant forage (<i>Pogonomyrmex</i> sp.) was found.</p>
205.	California State Parks	Section 3.12 should more accurately address the level to which the SSTC is critically important to the long-term sustainability of healthy migratory and shore bird populations throughout the Pacific flyway. Potential long-term negative effects from the proposed increases identified in the Draft EIS should be more accurately quantified and appropriate mitigation and avoidance measures proposed.	Please see the analysis of impacts to Migratory Birds in Section 3.12. The Navy is committed to work with the Port to fund surveys for waterfowl and shorebirds throughout San Diego Bay every three years. Baywide surveys follow a consistent protocol, and will be used to document future changes in bird abundance, diversity, and use of the Bay. Section 3.12.1.2 of the EIS summarizes over 500,000 observations of San Diego Bay birds by species, location, abundance, diversity, and bird group. The FEIS text will be revised to state that The American Bird Conservancy has designated the South San Diego Bay Unit as a Globally Important Bird Area due to the presence of globally significant numbers of nesting gull-billed terns and continentally significant numbers of surf scoters, Caspian terns, and western snowy plovers. The entire southern end of San Diego Bay, including Sweetwater Marsh and South San Diego Bay Units, has been recognized as a Western Hemisphere Shorebird

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			Reserve Network Site.
206.	California State Parks	<p>Section 3.13 addresses cultural resources on lands adjacent to CSP properties. CSP reviewers found the history of dredging on the strand inadequate to review mitigating measures, and as a result, questioned conclusions such as:</p> <p>As mentioned in 3.13.1.1.2, the training areas in SSTC-North are located on fill deposits that resulted from the dredging of San Diego Bay and the construction of Zuniga Jetty. These fill areas have no potential for in situ heritage resource deposits (3.13-5).</p> <p>From experience on adjacent CSP properties, the dredged areas are non-contiguous, and depending upon depths, cover cultural materials that should be addressed both in the SSTC-North and SSTC-South areas. Should the SSTC-South prehistoric sites assumed to be eligible to the National Register have been on CSP land, the 'Summary of Effects' (Table ES-2) conclusion that foot traffic is not an adverse impact would have been questioned. This is especially true to the west of the highway where CSP staff have noted cultural materials in shell middens located undisturbed within centimeters of the surface.</p> <p>Regarding submerged cultural sites, underwater shipwrecks and other offshore cultural materials deserve better protection than promised avoidance. As reported in the cultural resource history, Manila galleons have been passing Silver Strand since 1565. The more deeply-submerged prehistoric materials would be difficult to impact with the increased operations described, but some of the submerged historic sites will be impacted by the activities in Alternatives 1 and 2. Assurances that more specific locations and depths will be recorded with the federal clearinghouse (the South Coastal Information Center), and that Navy cultural resource managers will take an active part in designing these avoidances is requested.</p>	<p>The dredge-spoil fill areas described in the EIS as having no potential for in-situ heritage resource deposits are those on the seaward side of SSTC-North. Over time, these deposits have been repeatedly disturbed by amphibious support training activities without any direct or indirect evidence of buried cultural deposits ever observed in the zones used for training. There is a buffer immediately adjacent and parallel to the western side of SR 75 coincidental to the original Silver Strand shoreline that is avoided by training activities and within which are located the recorded archaeological deposits listed in Table 3.13-1.</p> <p>The Summary of Effects reference to foot-traffic-only activities not being accountable as an adverse effect applies principally to the terrestrial training area at SSTC-South. This programmatic finding derives from both the dispersed nature of pedestrian-only NSW training activities at SSTC and past consultation determinations of the effect of these kinds of training there and on other NB Coronado ranges, including San Clemente Island. This finding is supported by the prescription that the areas of recorded archaeological sites are restricted to foot traffic only. The finding is also supported by the understanding developed through site evaluations at SSTC-South in 2007 (Underwood 2008), which found that none of the five recorded site areas tested (out of an overall 12</p>

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			<p>recorded sites) across the northern portion of SSTC-South possessed sufficient integrity to recommend the NRHP eligibility. For the purposes of this EIS, this no adverse effect precedent is applied in accordance with authorities stipulated under the San Diego Metro Area PA.</p> <p>Regarding submerged cultural resources, the primary potential derives from the point-specific Single Anchor Leg Moor (SALM) component of Offshore Petroleum Discharge System (OPDS) training activities. This is a point-specific disturbance described to occur in a zone approximately one mile across all the SSTC-North boat lanes. While late-19th and early-20th-century shipwrecks are documented to have occurred in the vicinity of the SSTC offshore training areas, only the general locations of these resources are known, and none of these appear to fall within the zone of potential effects of SALM/OPDS activities. In the absence of referenced shipwreck locations within this zone, the type comprehensive underwater survey to identify specific locations and depths for submerged resources is deemed unnecessary, and impractical at the several square km scale that would be required. The existing training activity protocol to have divers directly observe the bottom in advance of placement of the SALM to avoid hazards, including shipwrecks, fouling the mooring anchor and associated tackle is considered the better training-activity-specific approach to avoiding inadvertent effects to any observable submerged resources that might be present.</p>
207.	California State Parks	<p>The EIS considers the potential effects on traffic flow and concludes that the capacity of Highway 75 will not be significantly affected. However, CSP is also concerned about the effects that the significant increase in military operations will have as a distraction to motorists on Highway 75. The potential for creating hazardous driving conditions due to military distractions may be exacerbated during peak beach visitation periods. The EIS should analyze this aspect of its proposals potential effects on highway safety and propose appropriate mitigations.</p>	<p>The majority of activities are out of sight of SR-75. Existing and proposed activities will not cause a visual distraction to drivers. The Navy is responsible for motorists on federally controlled land and the California Department of Transportation is responsible for regulation of vehicles on public roadways and lands. While hazardous driving conditions due to military activities are extremely unlikely, drivers' adherence to various speed and traffic control measures are the responsibility of the State, the City of Imperial Beach, and the City of Coronado, and outside of Navy jurisdiction.</p>

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208.	California State Parks	<p>Nearly 1/2 million people visit Silver Strand State Beach each year, most during the spring and summer between April 30 and September 15. The EIS fails to adequately evaluate the effect that increased military operations will have on the visual experience these beach goers have grown accustomed to. Visitors come to Silver Strand to enjoy surf-play, wide sandy beaches and eyelevel views of the ocean, frames by scenic Pt. Loma (to the north) and the Coronado Islands (to the south). The EIS needs to propose means by which the negative visual effects of increased military operations can be minimized, including, but not limited to, considering the seasonality of operations.</p> <p>California State Parks appreciates the opportunity to comment on the DEIS and hopes that our comments contribute to a better project.</p>	<p>The Navy has analyzed all potential Land Use and Socioeconomic conflicts within the ROI. The increase in proposed training activities will not result in a change in the public's visual experience because training is currently being conducted in the areas around SSSB. There are no proposed changes in the view shed. The Navy is not infringing on any public lands that are used by the adjacent communities.</p>
209.	California State Lands Commission	<p>Staff of the California State Lands Commission (Commission) has reviewed the above referenced document and offers the following comments on the draft Environmental Impact Statement (DEIS). We understand that this project has not undergone review under the California Environmental Quality Act (CEQA). Depending on what other State or local agencies have discretionary action over the proposed project, the CSLC may take the role of a Lead Agency or a Responsible or Trustee Agency under CEQA.</p> <p>As background, the State acquired sovereign ownership of tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. All tidelands and submerged lands, as well as navigable rivers, sloughs, etc. are impressed with the Common Law Public Trust. The Public Trust is a sovereign public property right, in the nature of an easement, held by the State or its delegated trustee for the benefit of all the people. This right limits the uses of these lands to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, open space, or other recognized Public Trust purposes. A lease from the CSLC is required for any portion of a project extending onto state-owned sovereign lands, which are under its exclusive jurisdiction. As to lands involving the Public Trust Easement, the property is subject to certain land use restrictions and public rights and any inconsistent use with the easement may be prevented by the CSLC.</p> <p>CSLC has issued a lease to the Navy for a portion of the beach at the Silver Strand, Lease PRC 6319.9, between the Ordinary High Water Mark of 1941 and the Ordinary High Water Mark of 1948. The Pacific Ocean waterward of the Ordinary High Water Mark of 1948 is not covered by a lease from CSLC.</p> <p>Based on a review of the information provided, it has been determined that the Alternative 1 (Preferred Alternative) for the proposed project will be located within state sovereign lands under the leasing jurisdiction of the Commission. The U.S. Navy will need to apply to the Commission for a lease for that portion of the beach which is not currently covered by the existing lease.</p> <p>The Commission will need to make a CEQA determination prior to consideration of lease approval. Based on the information provided in the DEIS, a CEQA document will most likely</p>	<p>The Navy, as a federal agency, analyzes the potential environmental impacts of its proposed actions under NEPA. CEQA applies to the discretionary actions of California State public agencies. The actions proposed within this EIS require no new leases of land from the State; and there are no other anticipated State or local agency discretionary actions that would trigger a CEQA review. However, if a real estate action, such as a lease, is determined to be in the best interests of the Navy and the State, the State may be required to conduct a CEQA review of the lease agreement. If the State needs to conduct a CEQA analysis, the Final EIS may be referenced in State CEQA analysis.</p> <p>Under the Commerce Clause, Article 1, Section 8 of the U.S. Constitution, the federal government is conferred a "dominant servitude" over navigable waters and the underlying land. Exercise by the federal government of this Constitutional power is not an invasion of any property rights in the water or underlying lands and is not a taking of property within the meaning of the Fifth Amendment. None of the actions proposed below the ordinary high water mark create permanent fixtures or permanent attachments to the underlying land. It is the Navy's position that the federal actions proposed in this EIS create no obligation to enter into real estate leases or agreements with the State owners of lands underlying these navigable waters.</p>

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		<p>need to be prepared for the proposed project in order to cover our discretionary action (lease within state sovereign lands). The CEQA document would need to include all information required under Public Resources Code, section 21000 et seq., including identifying the project's potentially significant impacts and mitigation measures to clearly avoid or mitigate those significant impacts. Public review and all appropriate noticing of the CEQA document (CEQA Guidelines, sections 15072 and 15073), as well as a Mitigation Monitoring Program, will need to be completed. In addition to the information provided in the EIS, the CSLC would need copies of any cultural resource reports completed on land under the jurisdiction of the Commission. Any artifacts found on lands under the jurisdiction of the Commission are considered the property of the state of California. Any disposition of these artifacts requires the approval of the Commission and a transfer of title may be required.</p> <p>The Commission would also like to receive copies of the following documents:</p> <ul style="list-style-type: none"> <li>• Applicable State regulatory agency permit applications prepared for the project; and</li> <li>• California Coastal Commission Consistency Determination if or when available.</li> </ul>	
210.	City of Imperial Beach, California, Office of the City Manager	1. Due to limited staff and time, our review was not as thorough as we wished. Also given the length of the document and approximately a decade it took to prepare, we request an additional review period of 45 days.	The Navy recognizes the public involvement in the NEPA process. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30, 2010.
211.	City of Imperial Beach, California, Office of the City Manager	2. The DEIS does not adequately allow a reader to assess the current and proposed activities within each lane and thus it's difficult to distinguish the impacts in the southern zones from the northern ones, and the changes from current to proposed activities.	Scheduling flexibility and requirements prohibit the Navy from analyzing its training activities in this manner. The Navy has performed an equally proficient method of analysis within the SSTC EIS by analyzing all individual affected resources within the region of influence and not specific areas of training.

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212.	City of Imperial Beach, California, Office of the City Manager	3. With the increase in aircraft activities and firearm discharges, we request that helicopter sorties and firearm discharges stop no later than 10:00pm and start no sooner than 7:00 a.m.	<p>Realism in training is an essential element of SSTC training. Nighttime operations are an important part of training at SSTCS to ensure personnel are prepared for real world situations. NASNI and NOLF-IB, Imperial Beach have a suite of policies, procedures, and programs to address and promote measures to minimize aircraft noise.</p> <p>NOLF-IB is open for flight operations from the last Sunday in October to the first Sunday in April on Monday-Thursday from 0800 to 2230 and on Friday from 0800 to 1800 Pacific Standard Time. NOLF-IB is open from the first Sunday in April to the last Sunday in October on Monday - Thursday from 0800 to 2300 and on Friday from 0800 to 1800 Pacific Daylight Time. The airfield is closed from 1800 local time the day prior to and during all government holidays. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document.</p>
213.	City of Imperial Beach, California, Office of the City Manager	<p>4. In light of the decrease in beach access due to the increase of training activities, we suggest three mitigation steps:</p> <p>a) The Navy create an alternative pathway running from the general vicinity of the western end of Carnation Street heading in a northeasterly direction along the perimeter of the southern boundary of the base (roughly the northern boundary of 18) to the eastern boundary of the base that parallels SR-75; then proceeding northward on an existing path currently available to the public until the path ceases a bit south of the Cays; then proceeding in a northwesterly direction on Navy property to connect with Silver Strand State Park. This would provide walkers, joggers, runners, bicyclists a north-south pathway/trail to mitigate for the loss of beach access.</p> <p>b) People also walk their dogs along the part of the beach that will be greatly affected by the increased training, and therefore we suggest that the Navy create and maintain a "dog park" somewhere along the southern perimeter of the base somewhere east of Camp Surf. (The Navy had allowed the public to use an area just east of the entry gate on Silver Strand in IB as a dog park. The area is now closed to the public, but it is a possible site to mitigate the impact of the training activities that reduce access to the beach.)</p> <p>c) The Navy should assist in funding beach sand replenishment efforts. For example, the Navy could help the Corps of Engineers with dredging the entry to San Diego Bay and placing the dredge materials (sand) nearshore or on the beach along the coast of Imperial Beach. The City</p>	<p>The Navy analysis within the EIS in Section 3.1; Land Use conclude that no impacts on SSTC-S beaches required mitigation. The Navy will not be including a pedestrian trail as mitigation.</p> <p>The suggested mitigation measure has no real "nexus" with the perceived impact, and the non-significant impact does not require mitigation.</p>

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		<p>prefers that sand be placed onshore because this is the best way to preserve our beaches. Preserving the beach between Carnation Street and the mouth of the Tijuana River would be a measure that mitigates the reduced beach access caused by the increase of naval activities along the Silver Strand north of Carnation.</p>	
214.	City of Imperial Beach, California, Office of the City Manager	<p>5. In light of the overall increase in noise due to helicopter activities, firearms and other training activities, mitigation activities should include:</p> <p>a) Strict adherence to flight patterns at Ream Field that will not allow fixed-wing and helicopter flights over homes in Imperial Beach.</p> <p>b) There should be no helicopter training at Ream Field after 9:30pm. All flights should be heading back to their home base after 9:30pm.</p> <p>c) Work with the City in developing a more effective notification system of planned training activities that have the potential to impact residents of Imperial Beach (in addition to the standard notification provided to our Public Safety Department when exercises involve pyrotechnics or firearm discharges).</p>	<p>Navy operations at NOLF are outside of the scope of the Proposed Action, but are addressed under Cumulative Impacts. Airfield restrictions for NOLF and NASNI are discussed above in comment response #212. The Proposed Action addressed in this EIS does not involve helicopter activity at NOLF, so impacts of those activities cannot be mitigated in this EIS.</p> <p>As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.</p>
215.	City of Imperial Beach, California, Office of the City Manager	<p>6. Table 3.6-9 indicates that Camp Surf is situated further away from the noise source than the residential areas of Imperial Beach when the other tables show Camp Surf closer to the noise source than the Imperial Beach residential areas. Please explain.</p>	<p>The reason the distances vary is because the locations of the sources change from table to table.</p>
216.	City of Imperial Beach, California, Office of the City Manager	<p>The City of Imperial Beach appreciates the additional time the Navy has afforded the public to review and comment on the environmental document that assesses the potential impacts of the Navy's proposal to provide increased operationally and realistic training for naval personnel at the Silver Strand Training Complex (SSTC). The City offers the following additional comments on the environmental document:</p> <p>1. The City of Imperial Beach concurs with the comment by the City of Coronado that the DEIS does not adequately address the increased environmental impacts to surrounding properties that would result with the proposed activities. While the DEIS acknowledges that the preferred plan will result in increased impacts, additional or more effective mitigation measures are not proposed to reduce the impacts preferably to a level of insignificance. The lack of mitigation measures despite the major increase in activities and impacts seems, at best, illogical. Mitigation measures are necessary to reduce the significant impacts resulting from the increase in quantity and types of activities proposed.</p>	<p>The City of Coronado's letter has been received and the component concerns have been addressed, and the EIS has been modified where applicable. The Navy appreciates the comments from both City Councils. The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness and realistic training while minimizing potential impacts to the surrounding area.</p>

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217.	City of Imperial Beach, California, Office of the City Manager	2. The City also wishes to modify our previous comment of our letter of March 5, 2010 wherein the City proposed a pedestrian and bicycle path from Carnation Avenue to Silver Strand State Park. We would like to refer to this path as a "Proposed Coastal Mitigation Trail" due to the potential loss and/or adverse impacts to the existing and long-utilized beach access along the shoreline adjacent to the Navy Radio Receiving Facility (NRRF).	Your comment has been noted, and the Navy is committed to a continued dialogue on the Coastal Trail.
218.	City of Imperial Beach, California, Office of the City Manager	3. We request that the Draft EIR carefully analyze the impacts the increased activities will have on traffic on SR 75 and Palm Avenue to Interstate 5.	The SSTC EIS has analyzed traffic impacts from the proposed increase in training activities at SSTC. There would be no increase in personnel stationed at SSTC as a result of the implementation of the Proposed Action. Currently, intersections and roadways within the ROI typically experience an acceptable LOS. Although the intersections at Gates 1 and 2 experience unacceptable LOS, traffic related to the Proposed Action represents less than one percent of the morning volume and less than two percent of the evening traffic at these intersections.
219.	City of Coronado, Office of the City Council – Carrie A. Downey	<p>The citizens of Coronado appreciate and support the training of our military forces to insure their safety and efficacy when they are sent to perform their duty in hazardous conflicts around the world. However there needs to be a balance between developing realistic training scenarios on bases and ranges that are in the midst of highly developed residential areas. I provide the following additional recommendations for traffic, noise, and public safety mitigation. These actions would increase the cooperation between Coronado residents and the Department of the Navy (DON) for status quo operations, as well as for Alternative A increased tempo operations.</p> <p>1. Mitigation Measure 3.16.2.4.1 Exercise Planning. The DEIS lists the blanket statement "The Navy considers public safety in planning its exercises. Factors considered in evaluating the impact of the training on public safety include proximity of the activity to public areas; access control; schedule (time of day, day of week); public notification...."</p> <p>Considering isn't the same thing as doing. DON should notify the Coronado City Manager and CUSD Superintendent of ANY change in daily operations greater than 1% over the status quo. This is different than 1% over baseline in the DEIS. As the document point out the navy is attempting to get the historical activities NEPA compliant not what is currently taking place. "The U.S. military commenced operations in Afghanistan and Iraq as part of the Global War on Terror; the deployment of units overseas caused many range complexes, including SSTC, to experience temporary decreases in usage....Thus to include additional: A) personnel movements, B) equipment or supply deliveries, C) vehicle (including boats, cars, tanks helicopter drop offs, etc.) that could increase traffic or noise levels, and/or security procedures at the base gates. In the past all of these activities have caused significant traffic delays among Coronado residents without explanation.</p>	<p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.</p> <p>Regarding the increase in transportation at SSTC, an increase in SSTC training activities does not have the same traffic impacts as the homeporting of multiple aircraft carriers has had on the Coronado area. There would be no increase in personnel stationed at SSTC as a result of the implementation of the Proposed Action. The Proposed Action does include an increase in activities performed by existing personnel. The SSTC EIS adequately addresses impacts to traffic from</p>

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		<p>Currently the Department of the Navy notifies Coronado in advance of the deployment and return date of the aircraft carriers home ported in Coronado. This allows Coronado to make operational changes in the public safety and public works departments to have the appropriate city staff on hand to try to move civilian traffic should the need arise. Likewise the City Public Works Department makes sure Coronado does not schedule sewer repair work, or CALTRANS does not schedule road repair work on days where the military bases on Coronado will be experiencing increased traffic going to and from the bases. This system has worked well for large events such as movement of aircraft carriers but it would work equally well for events that do not rise to the level of a ship's movement but would increase traffic and noise in the surrounding community such as using the beaches and or base facilities as part of a Fleet exercise or other larger training evolution.</p> <p>Should the Navy need to use all 14 of the beach lanes in the Silver Strand Training Complex (SSTC) at both ends of Coronado, this would undoubtedly raise the noise levels and ' traffic along the Silver Strand Highway past the Coronado Cays residential development and the Silver Strand Elementary School. Both contain sensitive noise receptors, as acknowledged on page 3.6.1.4.1. The advance notification to the CUSD Superintendent would allow the option to move planned outside activities at the Silver Strand School inside or reschedule them to avoid the additional noise and or distraction it would provide the students. It would allow notification to the parents living in the Cays to expect increased traffic on the strand during school drop off time in the morning to insure school start time is not delayed.</p>	<p>increased training activities. The ADT of Coronado roads is discussed in Table 3.14-2. The EIS analyzed the Level of Service (LOS) of local roads to determine the contribution of military activities to overall traffic on public roads. Based on the analysis, increases in military training vehicle trips per day would represent less than two percent of the total daily traffic, and local roads would experience an acceptable LOS, with the exception of intersections at Gates 1 and 2; which would experience an unacceptable LOS. However, traffic generated under Alternatives 1 and 2 would represent less than one percent of the morning traffic volume and less than two percent of the evening traffic volume at these intersections, and this increased LOS would be well within the capacities of the existing regional roadway network.</p>
220.	City of Coronado, Office of the City Council – Carrie A. Downey	<p>2. Silver Strand Elementary School. Although the DEIS identify Navy Housing areas on Naval Base Coronado within the SSTC, and the location of the Silver Strand Elementary School, Table 3.6-4 Acoustic measurements during Fleetex 2002 does not provide measurements for the Silver Strand School. Please provide those measurements or an explanation that they area was not measured or is too far to receive noise from Fleetex if that is appropriate.</p> <p>Noise and traffic are not the only concerns for students and parents at the Silver Strand School. The lease agreement between to CUSD and the Department of the Navy is an example of how the military and community can work together to best serve the needs of military families and the community. The majority of the students educated at the Silver Strand Elementary School are dependants of active duty military service members, however there is a significant portion that reside in the Coronado Cays housing development that may not have exposure to military training or military weapons. The DEIS does not explain in depth what types and frequency of training will be visible to the students attending Silver Strand Elementary School.</p> <p>Under Alternative 1, the DEIS states in Section 3.16.3.3 that "SSTC land training activities would not employ live ammunition, with the exception of shotgun shells for breacher training and small arms for training inside bunkers on SSTC-S.....Flares, smoke grenades, and other small pyrotechnics unused in training do not release projectiles or scatter fragments, and thus have no potential for effects in the absence of direct contact."</p>	<p>The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness and realistic training while minimizing potential impacts to the surrounding area. In this manner, the Navy is adding mitigation measures for alerting the adjacent communities about events which may be considered intrusive as well as posting signage and controls regarding public access to the beaches.</p> <p>Impacts to Military Family Housing on Silver Strand, including the Silver Strand Elementary School, have been specifically discussed in 3.6.2.2.6 and 3.6.2.3.7 of the EIS. Measurements were not made at Navy housing areas or Silver Strand Elementary School because the primary noise concern was for residents closest to SSTC-S sound sources. However, sound from SSTC-N training would have the greatest effect on the Military Family Housing across from Boat Lanes 7-10 and on Silver Strand Elementary School. ELCAS training on</p>

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		<p>While some students would enjoy glimpses or military training, others may become frightened by the sight of Navy SEALs coming ashore with weapons. The exact nature of the visuals students and staff at the school could be exposed to should be clarified. Additionally, if there will be no live weapons of any kind used within sight of the school that needs to be clarified. The teachers and staff should be aware in advance of what might distract their students during lessons and plan accordingly. Advance notice to the CUSD Superintendant would be appropriate mitigation.</p>	<p>Bravo Beach may produce sound levels at the Military Family Housing of up to 81 dBA, 15-minute Leq during pile driving, which would occur periodically during the day and night. Intermittent pile-driving would have a greater effect on the houses that are closest to Bravo Beach during training at Bravo Beach, and on the houses closest to the Highway for training on the oceanside beach lanes. Sound from blanks and simunitions used during Hell Week could produce noise at Military Family Housing and the Elementary School, which would be above the typical daytime urban background sound level. Training exercises early in the morning would have a greater effect on residents than those occurring later in the day because the background sound level is lower at that time.</p> <p>The acoustic analysis presented in the FEIS describes the real-time effects of the various types of training sound on exposed individuals, such as speech interference and sleep disturbance, that can result in annoyance and stress. The FEIS acknowledges that such effects would occur occasionally, but concludes that the incremental effects of sound from the proposed training activities at SSTC would not have a substantial effect on the acoustic environment. As listed in NBCINST 3502-1 (dated 26 Mar 2008), the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities.</p> <p>Training activities presented in this EIS are typically not within the line of sight of CA-79, and are not expected to have an impact on the view from the Scenic Highway or from neighboring communities. Regarding the impacts on children at SSTC, no live weapons are used at SSTC. Simunition weapon activities used by Navy personnel are conducted at SSTC-S, and out of view of local schools and communities as well.</p>
221.	City of Coronado, Office of the City Manager – James F.	The City of Coronado has reviewed the above document and concluded that further information and analyses are required to determine the cumulative environmental impacts associated with the planned activities for the Silver Strand Training Complex (SSTC). Of particular concern are	The individual effects analyses of military activities (short-term and long-term) are presented in their individual sections, where the potential impacts are discussed in detail. The

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	Benson	the statements contained throughout the document that the military facilities and/or operations are not expanding; rather, just the frequency; therefore, no environmental mitigation is required.	determinations on the cumulative impacts of military activities are presented in Section 4 of the FEIS. The discussion in the cumulative impacts section is intended to present the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. The applicable impact analyses from the Environmental Consequences sections have been carried forward into the cumulative impacts discussion. As discussed in each resource section and summarized in Chapter 5 of the EIS, the Navy has analyzed the increases in frequencies of training events and has developed mitigation and protective measures to minimize potential impacts of the Proposed Action.
222.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS contains several areas where it acknowledges new operations and new activities will be occurring at SSTC. If more military operations and activities will be occurring at SSTC, then more personnel will be arriving in Coronado, and more vehicles will be commuting to and through Coronado impacting local streets. Not only will the additional traffic lead to impacts to intersections currently at unacceptable Levels of Service, but the overall preferred plan of continued plus new activities and operations will lead to significant cumulative impacts on traffic, noise, greenhouse gas emissions, and the public's access to utilize the waters of the State, which, when considered together, should be mitigated.	Regarding personnel-pedestrian and vehicle increases in traffic, there would be no increase in personnel stationed at SSTC from the implementation of the Proposed Action. The Proposed Action does include an increase in activities performed by existing personnel.  The activities associated with the Proposed Action would be increased, but would not increase the signal phase times at NAB intersections. There would be no increase in greenhouse gases from personnel transit because personnel tempo will remain the same, as indicated above. A further discussion of greenhouse gas emissions is presented in Chapter 4.
223.	City of Coronado, Office of the City Manager – James F. Benson	Please revise the draft EIS to address the questions and concerns described on the attachment.  Of note is that the draft EIS does not appear to adequately address the expanded activities of the Preferred Alternative and associated traffic, noise, and coastal access impacts to surrounding properties within SSTC corridor, both individually and cumulatively. The draft EIS acknowledges increased noise impacts, durations, and sound levels; however, no mitigation is proposed based upon the assumption that activities currently exist and there will be an expansion over a broader area that will minimize noise impacts. The draft EIS needs to be revised to properly address, analyze, and quantify the items detailed in the list attached to this letter.	The training activities associated with the SSTC have been directly analyzed in the respective resource sections of the EIS. The expanded activities discussed in the EIS have been analyzed in the respective sections of Chapter 3 and the additional training activities that are not associated with SSTC have been analyzed in the cumulative section of the EIS. The Navy has developed mitigation plans for activities that may cause an impact to the environment, and has presented these in the EIS. The Navy has analyzed the activities associated with SSTC, with both the public and the environment in mind, to achieve operational readiness while minimizing impacts to the surrounding area. Based on this analysis, mitigation has been added to Navy procedure where the potential for an adverse effect has been found; these measures are described in full in Section 5 of the FEIS.

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224.	City of Coronado, Office of the City Manager – James F. Benson	<p>Lastly, it was pointed out to the Coronado City Council at their meeting of March 2, 2010, that the citizens of Coronado have not had adequate time to review this document. Given the fact that the plan has been under study since 2001, it would seem appropriate to provide the public with more than 45 days to review such a voluminous document. The City requests an extended public review and comment period for the EIS.</p> <p>Thank you in advance for reviewing and responding to our questions and requests for further information so the City can adequately determine the scope of anticipated environmental impacts to the Silver Strand corridor associated with the Navy's Silver Strand Training Complex. The City also appreciates your serious consideration of an extended period of time to review the document to allow for full public participation and review of this important study.</p>	<p>The Navy has conducted numerous outreach events and briefs to local governments and special interest groups. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30th.</p>
225.	City of Coronado, Office of the City Manager – James F. Benson	<p>1. The draft EIS acknowledges there will be new squadrons, flight patterns and helicopter training occurring at SSTC. The draft EIS fails to identify the location points where the helicopters will take off and the paths of travel to and from the training areas and any increased public safety risks to residents, school populations, and beach users due to the increased amount of flight activity as well as the increased frequency and noise associated with the increased frequency of activity. The draft EIS should address, quantify, and analyze these issues.</p>	<p>Potential public safety risks are discussed in Section 3.16.2.1 of the FEIS and potential acoustic impacts from aircraft activities are discussed in Section 3.6.2.2 and 3.6.2.3 of the FEIS.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1.5 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to Sections 2 and 3.6 (Acoustic Environment) of the SSTC EIS document, and beginning a descent into SSTC-S Department of Homeland Security or U.S. Coast Guard</p>

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226.	City of Coronado, Office of the City Manager – James F. Benson	2. Section 3.1-12 notes that 80% of flight occurs over the water and aircraft are required to approach and depart from training activities over the water. Is there a map that shows this flight pattern? What is the flight pattern for the remaining 20% including both approach and departure locations? The draft EIS should address, quantify, and analyze these issues.	<p>A map presenting flight routes will not be added to the FEIS; however, Chapter 9, paragraph C (Noise Abatement) of NBC Instruction 3710.7U (Air Operations), dated September 10, 2008 states that: (a) pilots shall ensure altitude minima as prescribed in the OPNAVINST 3710.7 series and course rules, (b) flights directly over the city should be avoided, and (c) H-53 model aircraft are prohibited from using NOLF-IB.</p> <p>Helicopter overflight patterns are described in Section 3.6 for use in the acoustic analysis. Navy activities at NOLF IB are outside the scope of the Proposed Action, but are addressed under Cumulative Impacts. Airfield restrictions for NOLF and NASNI are discussed above in comment response #212. The Proposed Action addressed in this EIS does not involve helicopter activity at NOLF, so impacts of those activities cannot be mitigated in this EIS.</p>
227.	City of Coronado, Office of the City Manager – James F. Benson	3. Section 3.1.2.3.1 notes a new activity, N8 Tactical Recovery of Aircraft and Personnel, would involve landing or hovering of helicopters at SSTC-S at nighttime. Where exactly within the southern area of the training complex would this activity occur? How many aircraft, how frequent and for what duration would this occur?	As discussed in Chapter 2, Table 2-2, all TRAP activities will occur on SSTC-S beaches and within the SSTC-S fence line. The Navy proposes four TRAP activities under Alternatives 1 and 2, which involve up to four helicopters (Appendix C). The helicopter landing zone is located near Bunker 99 in the northern portion of SSTC-S. No helicopters will hover over the beach.
228.	City of Coronado, Office of the City Manager – James F. Benson	4. Section 3.6-26 discusses Acoustic Impacts associated with the Preferred Alternative. The draft EIS notes sound levels will remain the same but training events producing sound would increase in frequency. No mitigation is proposed. The draft EIS needs to analyze the noise impacts of the increased number of training events both individually and cumulatively.	<p>With regard to helicopter sound, the analysis in Section 3.6 indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. Because of the logarithmic nature of sound; a doubling of sound energy results in only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p> <p>Helicopter activity discussion has been added to Cumulative; Section 4.3.6. The Section discusses the various squadrons based out of NASNI and the number of helicopter flights that these squadrons generate. The Navy AICUZ study is being</p>

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			<p>updated to identify all flights generated from NASNI and NOLF.</p> <p>The acoustic analysis presented in the FEIS describes the real-time effects of the various types of training sound on exposed individuals, such as speech interference and sleep disturbance, that can result in annoyance and stress. The FEIS acknowledges that such effects would occur occasionally, but concludes that the incremental effects of sound from the proposed training activities at SSTC would not have a substantial effect on the acoustic environment. Therefore, other than existing administrative controls on the placement of activities discussed in Section 3.6.1.6, no sound-related mitigation measures were proposed.</p>
229.	City of Coronado, Office of the City Manager – James F. Benson	<p>5. a. Section 3.6.2.3.2 notes existing aircraft noise is increasing from 778 helicopter sorties per year to 2,220 per year representing a 185% increase. What is the duration and frequency of the sorties? The Amphibious Raid activity is noted to represent the most intense aircraft sound event at SSTC and the frequency of the events would increase to 18 per year. What is the duration of these events? It is not clear from the tables and maps where these activities would be located.</p> <p>b. An additional activity noted as Tactical Recovery of Aircraft and Personnel (TRAP) notes 5 helicopters could be employed and the activity would occur at night, lasting one to two hours. It does not appear to be identified in Table 2-2 and it is not clear where this activity would occur.</p> <p>c. Cumulatively, the analyses conclude the types of activities described have occurred over time and the only difference is the frequency and no mitigation is required. If the number of activities, duration of activities, and type of activities increases, the amount of noise will unquestionably increase representing significant changes in noise levels to the area and should be mitigated.</p>	<p>a. As proposed under Alternatives 1 and 2, up to 1,643 helicopters could be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. While the Amphibious Raid activity as a whole may take up to three days to complete, the use of helicopters may only be approximately four hours (Appendix C).</p> <p>The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes. The NBC PAO can be contacted for noise complaints and operational suggestions.</p> <p>b. TRAP is identified in Table 2-2, and states that; “TRAP consists of the insertion of up to 75 personnel ashore via four to six helicopters hovering and/or landing at a designated inland drop zone in northern part of SSTC-S.”</p> <p>c. The individual effects analyses of military activities (short-term and long-term) are presented in their individual sections, where the potential impacts are discussed in detail. The determinations of the impacts of military activities are also presented there. The discussion in the cumulative impacts section is intended to present the impact on the environment which results from the incremental impact of the action when</p>

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			added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. The applicable impact analyses from the Environmental Consequence sections have been carried forward into the cumulative impacts discussion.
230.	City of Coronado, Office of the City Manager – James F. Benson	6. How do the planned flight paths for new helicopters (to and from SSTC) align with the current Airport Land Use Study for the military bases? How will these planned/proposed paths affect a study that is currently underway for the NAB and those existing uses within the project boundary?	The planned flight paths under the Proposed Action remain unchanged from existing flight corridors, and are in line with the current Airport Land Use Study. The current AICUZ study will not be impacted because there are no changes to the flight paths.
231.	City of Coronado, Office of the City Manager – James F. Benson	7. The draft EIS does not identify the flight path and accident potential zones (APZs) areas for the helicopters and aircraft in transit to SSTC. The document references NAVFAC P-80.3 indicating APZ is not required. Provide documentation from the referenced document justify/explaining why none is required.	<p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean. As listed in P80.3, APZs are developed for runways and landing pads rather than for transit routes.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water at nighttime. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns as well as the percentage of sorties associated with training at SSTC has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment) and beginning a descent into SSTC-S Department of Homeland Security or U.S. Coast Guard</p>
232.	City of Coronado, Office of the City Manager – James F. Benson	8. The Acoustic Environmental analysis notes there will be an increase in the frequency of aircraft; increase in amphibious vehicle training; increase with ELCAs and associated pile driving; increase in Breacher activities and use of shotgun blasts. The draft EIS notes while all of these activities will be generating increased noise levels, only the frequency of activity will be increasing; therefore, no mitigation is proposed. Mitigation is identified as the Navy's ongoing process and procedures to notify adjoining agencies/facilities when disturbances will occur. Public notification that noise impacts will occur does not mitigate the noise impacts experienced	Hearing loss may occur where individuals are exposed to a sustained noise level of 85 dB or above. The training activities at SSTC do not result in sustained sound levels of this intensity in off-installation areas. Therefore, tinnitus and hearing loss would not occur as a result of SSTC training activities.

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		by students and school officials, residents and tourists.	The activities will increase with implementation of the Proposed Action and the Navy acknowledges that a substantial increase in the frequency of impulsive noise events is likely to result in some increase in such reactions in the community. The acoustic analysis presented in the FEIS describes the real-time effects of the various types of training sound on exposed individuals, such as speech interference and sleep disturbance that can result in annoyance and stress. The FEIS acknowledges that such effects would occur occasionally, but concludes that the incremental effects of sound from the proposed training activities at SSTC would not have a substantial effect on the acoustic environment. Therefore, other than existing administrative controls on the placement of activities discussed in Section 3.6.1.6, no sound-related mitigation measures were proposed.
233.	City of Coronado, Office of the City Manager – James F. Benson	9. Section 2.3, page 2-27 discusses Alternative 1 as the Navy's Preferred Alternative and is "designed to meet Navy and Department of Defense (DOD) current and near-term operational training requirements." How is "near-term" operational training requirements defined? Is there an estimate for how long these expanded activities, increased training tempos and operations will meet the 100% training needs as identified in the draft EIS? Is this for a period of 5 years, 10 years or longer? If some of the "new" activities and training operations need to be expanded in the future to meet Navy mission requirements, will a supplemental Environmental Assessment be completed?	Near-term operational requirements are defined as baseline training tempo that was established by taking into consideration the historical usage data at SSTC, specifically, from 2001 through 2007. It's important to note that during this period, the U.S. military commenced operations in Afghanistan and Iraq as part of the Global War on Terror. Many of the units that would normally be training at SSTC were deployed overseas. Additionally, the focus of the individual and unit training temporarily shifted to inland (desert or mountainous) environments to prepare personnel for conditions they would encounter in combat operations overseas. As such, SSTC has experienced temporary decrease in training usage and tempo during the period being evaluated (2001 through 2007). To establish baseline training tempos, the Navy evaluated available 2001 through 2007 training data, considering year-to-year fluctuations as well as the recent progressive decline in training tempo at SSTC. For each training activity, the Navy selected 2001- 2007 data that were most reflective of the average historical training conditions over the past few decades. Implementation of the Proposed Action would occur over a five year period. Training activities will be evaluated in five years (2015) for the accuracy of meeting 100 percent of the training requirements as analyzed in the EIS. If new mission requirements are necessary to support training needs, supplemental NEPA documentation may be required.

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234.	City of Coronado, Office of the City Manager – James F. Benson	10. The Purpose and Need section discusses "increased training tempo" from current baseline conditions. This needs to be better defined to be properly analyzed. For example, the baseline tempo of 3,926 activities indicates it is not associated with personnel. The Preferred Alternative indicates an increase in activities approximately 41% to 5,543 activities but there are no associated man hours to correspond to these activities. The draft EIS should be revised to address/clarify increased training tempo of approximately 41% without increased personnel.	There is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action. The Proposed Action does include an increase in activities performed by existing personnel. This clarification has been added to Section 2 of the FEIS
235.	City of Coronado, Office of the City Manager – James F. Benson	11. Section ES 1.3.1 documents the increase of Naval Special Warfare personnel operating on NAB Coronado, equivalent to one additional Sea, Air and Land team. It also documents the realignment of the Explosive Ordnance Disposal groups, which has necessitated expanded use of the Southwest Region training venue, including SSTC. The Marine Corps will also increase the number of personnel cycling through training programs at SSTC. Finally, it discusses new platform, training equipment, and service life extension programs to keep up with current needs. All of the needs correspond to additional personnel training at SSTC but they are not quantified nor are their impacts on the community accounted for in the draft EIS. In particular, what are the impacts to daily traffic as these new personnel travel to and from NBC to participate in this training?	Personnel participating in activities under the Proposed Action have been accounted for within Chapter 2. The SSTC EIS has analyzed traffic impacts as a result of the increase in activities at SSTC. There is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action. Overall, there is an increase in military vehicle traffic and traffic related to the Proposed Action represents less than 1 percent increase of the morning volume and less than 2 percent increase of the evening traffic at these intersections.
236.	City of Coronado, Office of the City Manager – James F. Benson	12. The Traffic and Circulation section notes there will be an increase in trips resulting from increased activities and operations; however, it will be less than 2% of the total daily traffic generated. The draft EIS acknowledges Gates 1 & 2 currently experience unacceptable Level of Service. The draft EIS notes that since the increased activity will amount to 2% of traffic, no mitigation is proposed. Any further decrease to the level of service to these intersections should be analyzed and addressed.	The SSTC EIS has analyzed traffic impacts as a result of the increase in activities at SSTC. There is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action. Currently, intersections and roadways within the ROI typically experience an acceptable LOS. Although the intersections at Gates 1 and 2 experience unacceptable LOS, traffic related to the Proposed Action represents less than 1 percent of the morning volume and less than 2 percent of the evening traffic at these intersections.
237.	City of Coronado, Office of the City Manager – James F. Benson	13. Section 4.3.14, Page 4-22 Transportation and Circulation cumulative analysis does not adequately analyze the impacts associated with the "increased tempo" of activities proposed with SSTC Preferred Alternative. Where are the estimated traffic generation rates to arrive at the conclusion of a less than 2% increase in traffic? How can an argument be made that since the number of employed are not increasing, therefore, there will be no increase in traffic? What about the new and expanded activities and training planned for SSTC? Where are these "employees" coming from when some of the activities are "new" to SSTC? The document should analyze all the trips associated with the increased training activities including commuter access to/from SSTC/NBC.	The Proposed Action does not include an increase in personnel stationed at SSTC; therefore, traffic generation rates were not calculated on increased personal vehicle trips into the region of influence. However, traffic generation was estimated based on the additional military vehicles needed to support the proposed increase in training and the time of day the increased military vehicle use would occur. Based on these estimates, the increase in military vehicle traffic and traffic related to the Proposed Action represented less than 1 percent increase of the morning volume and less than 2 percent increase of the evening traffic at these intersections. Based on the analysis, increases in activities did not have a substantial impact on the existing LOS because new and expanded activities would not occur at times when intersections are at their busiest; in the morning and afternoon peak hours. In addition, activities

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			contributing to peak hour traffic are already accounted for in the baseline. Any new activities would not be scheduled at the peak hours but at other times of the day when the LOS is acceptable.
238.	City of Coronado, Office of the City Manager – James F. Benson	14. Table 2.1, Baseline and Proposed Tempos for SSTC Training Activities, identifies 78 training activities along with duration and number of events per year. The document should relate the activities to number of personnel. How many people are training under the baseline and how many will be training under the proposed activities?	As stated above, existing personnel tempo will not change as a result of implementation of the Proposed Action. This information is presented in detail in Appendix C and this appendix is now referenced in Section 2 of the FEIS.
239.	City of Coronado, Office of the City Manager – James F. Benson	15. Table 2-2, Proposed New Training Activities at SSTC for Alternatives 1 and 2, identifies 11 new activities. The document should relate the new activities to the number of personnel. How many additional people will be trained under the new activities compared to the baseline?	As stated above, there is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action; the tempo of training will increase with the Proposed Action. Appendix C of the FEIS presents a detailed account of all components of training activities associated with the Proposed Action.
240.	City of Coronado, Office of the City Manager – James F. Benson	16. The draft EIS notes baseline activities will increase from 3,926 activities to 5,343. Many of the new activities are a result of new helicopter training activities such as 200 new mine hunting; 48 new helicopter mine detection; 100 helicopter activity; 48 MH-60s helicopters; 124-154 helicopter rope training; and 109 to 198 Close Quarter Combat with helicopter use. Amphibious Raise (with possible helicopter use) will expand from 6 days a year to 54 activities a year. Perhaps even more significantly, CRRC OTB Insertions and Pyrotechnics will increase from 4 day events approximately 52 times a year to 86 times a year. This change results in almost 365 days per year this activity will occur. The draft EIS does not analyze the cumulative impact of the entire new helicopter activities will have on the air when cumulatively combined. The draft EIS does not contain a section where analysis of combined activities along SSTC can be visualized and analyzed in terms of cumulative activities and noise.	As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water at nighttime. The only helicopters overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns as well as the percentage of sorties associated with training at SSTC has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment). Department of Homeland Security or U.S. Coast Guard Community noise levels from cumulative helicopter traffic is addressed in Section 4 of the EIS (Cumulative Impacts).  With regard to impacts to the air from training activities, Section 3.3 and 4.3 present impacts to air from the summation of all training activities.
241.	City of Coronado, Office of the City Manager – James F. Benson	17. Section 3.3.2.1.1, Emissions Evaluation Methodology, discusses emissions from ground vehicles only and should include vehicles involved in the training activities. It should also include all additional vehicles trips to get the personnel to the training (commuter trips).	There is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action. Therefore, the analysis focused on emissions from training vehicles, aircraft, vessels, and ordnance from training activities presented in the FEIS. Appendix C, which is referenced in Section 3.3, includes the emissions calculations for all vehicles, vessels, aircraft, and ordnance used in all activities.
242.	City of Coronado, Office of the City	18. Transportation and Circulation, Page 3.14-4 last paragraph states: The Rendova Road (Gate 1) and Tarawa Road (Gate 2) intersections operate at LOS E during the busiest morning	This has been updated in the FEIS to indicate the correct LOS in both locations.

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	Manager – James F. Benson	commute hours and Tarawa again operates at LOS E during the busiest afternoon commute hour. This conflicts with Table 3.14-3 which has a LOS F for Tarawa in both a.m. and p.m. peak hours.	
243.	City of Coronado, Office of the City Manager – James F. Benson	19. Transportation and Circulation Page 3.14-5, second paragraph states: The City of Coronado is currently in the process of analyzing traffic conditions for SR-75 to determine the best longterm traffic solutions for the community. This project is actually the SR 75/282 Transportation Corridor Project which is analyzing traffic conditions along the corridor between the bridge and NASNI, not SR-75 adjacent to SSTC.	This paragraph has been edited to describe the appropriate traffic conditions analyzed.
244.	City of Coronado, Office of the City Manager – James F. Benson	20. Section 3.14.2.3.1 Ground Transportation indicates under Alternative 1, military training activities are estimated to generate approximately 336 ADTs. The draft EIS should analyze all trips generated from the increased activities and increased training tempo.	The ADT of all public roads was calculated for all traffic, which would include any military traffic. The EIS analyzed the Level of Service (LOS) of local roads to determine the contribution of military activities to overall traffic on public roads. Based on the analysis, increases in military training vehicle trips per day would represent less than two percent of the total daily traffic, and local roads would experience an acceptable LOS, with the exception of intersections at Gates 1 and 2; which would experience an unacceptable LOS. However, traffic generated under Alternatives 1 and 2 would represent less than one percent of the morning traffic volume and less than two percent of the evening traffic volume at these intersections, and this increased LOS would be well within the capacities of the existing regional roadway network.
245.	City of Coronado, Office of the City Manager – James F. Benson	21. 3.14-5 Summary of Effects section: Silver Strand at Rendova Road and Silver Strand at Tarawa are signalized intersections with LOS E or worse. All additional traffic generated by the increased activity should be analyzed and the amount of delay calculated in accordance with the SANTEC/ITE Guidelines for the San Diego Region. In addition, there is no mention of the number of pedestrian crossings between the bay side and ocean side of NAB, which affects the signal capacity and causes delay. The document should quantify the number of pedestrian trips across SR-75 that occur and how many more would be expected under Alternatives 1 and 2.	Activities associated with foot and/or boat traffic that transfer from the bay side to beach side (e.g. Around the World, Activity 67) would not have impacts to intersections because personnel use the SSSB tunnel to go from bay to ocean. Established beach crossing lanes are also defined.
246.	City of Coronado, Office of the City Manager – James F. Benson	22. 5.13 Transportation and Circulation section does not propose or identify mitigation for the increased transportation and circulation in the proposed alternatives.	Section 3.14.3 indicates that no adverse effects on transportation and circulation were identified; therefore, no additional mitigation measures are warranted. The information presented in Section 5.13 includes the current measures, which facilitate joint military-civilian use of SSTC consistent with safety.
247.	City of Coronado, Office of the City Manager – James F. Benson	23. List of Preparers: A Traffic Engineer was not identified under the list of preparers. Who analyzed the Transportation and Circulation sections?	Commander, Pacific Fleet staff were responsible for preparing traffic generation estimates. The contractor for the EIS (SRS-Parsons Joint Venture) used the traffic estimation data to prepare the Transportation and Circulation section of the EIS.
248.	City of Coronado, Office of the City Manager – James F.	24. The draft EIS does not identify the potential impacts to the intersections due to increased foot and boat traffic from bay side to beach side. Do the increased activities warrant reevaluation of an underpass or overpass?	Activities associated with foot and boat traffic that transfer from the bay side to beach side (e.g., Around the World, Activity 67) would not have impacts to intersections because

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	Benson		personnel use the SSSB tunnel to go from bay to ocean. Established beach crossing lanes are also defined.
249.	City of Coronado, Office of the City Manager – James F. Benson	Section 5-5 refers to mitigation for underwater detonations and security precautions. When planned activities are underway, will areas of the public beach/water be cordoned off?	As described in Section 3.16.3.2.3, event participants will establish an appropriate exclusion zone for each event prior to detonation. Activities are not conducted if non-participants are observed in the exclusion zone.
250.	City of Coronado, Office of the City Manager – James F. Benson	Section 5-19 notes there is an interpretive sign planned for the bike trail near south Delta Beach. This sign would be located in the Scenic Highway Corridor zone and should be designed to be consistent with the overall Silver Strand Enhancement plan.	Your comment has been noted
251.	City of Coronado, Office of the City Manager – James F. Benson	Table 4-1, Page 4-2 notes future planned improvements for the Navy Lodge. It notes four existing buildings and several smaller structures will be demolished and will be replaced with a lodge building to increase room capacity as well as new recreational facilities, parking, retail shops and a restaurant. What is the approximate square footage of this new facility and net increase in units? Are these additional lodge units to be temporary "resort" type facilities or housing for living purposes as a BOQ or BEQ? Are these additional housing units being proposed to accommodate expanded military operations such as the two new commands at NASNI? The draft EIS further notes in this section that along with the commands, there will be construction of a pier, boat ramp, and several buildings. Where is this project being located and could it also serve as a potential pier/boat ramp to re-instate the ferry service to NASNI that was recently discontinued?	The Navy Lodge at NASNI is located adjacent to Breaker's beach, and is a recreational, resort facility for military and retired military families – not a housing facility for sailors assigned to NBC. The Mobile Security Forces and Naval Special Clearance Team-One Pier and Boat Ramp project will assess boat ramps and piers at NASNI and NAB. An NBC Commuter Working Group is evaluating options for another pier for Coronado ferry service.
252.	City of Coronado, Office of the City Manager – James F. Benson	Table 4-1, Page 4-3 briefly discusses the U.S. Navy Lighterage project, which involves construction of a waterfront command and control facility for amphibious construction Battalion One facilities to support the introduction of the improved Navy Lighterage System at NBC. The draft EIS does not describe this new system at NBC and should describe the activities associated with the system.	The activity that is associated with the Improved Navy Lighterage System (INLS) is Causeway Pier Insertion and Retraction (Activity 41), and has been analyzed by the Navy.
253.	City of Coronado, Office of the City Manager – James F. Benson	Section 4.3.16, Page 4-23 Public Health and Safety cumulative analysis notes there will be momentary disruptions in communication to nearby residences and schools. The draft EIS does not identify how frequently and for what duration. The draft EIS identifies impacts associated with the expanded activities planned for SSTC individually; however, it fails to cumulatively analyze the activities combined to determine the length and period of all activities combined on the residential and school areas. For example, it appears there will be full time operation of the beach lanes at SSTC almost every day throughout the year. Where have those activities - length, time, duration - been analyzed?	Section 4.3.6 describes activities associated with the Proposed Action that could occur simultaneously (e.g., Elevated Causeway activities and Hellweek) and that could produce a cumulative intrusive noise effect. However, loud activities would rarely occur at the same time or close to each other. Therefore, the cumulative effects of these increases on ambient noise levels would be minimal.
254.	City of Coronado, Office of the City Manager – James F. Benson	Table 3-1- states Coronado Beach is the only public beach in Coronado. This statement is incorrect. The Silver Strand State Beach is also located within the City of Coronado.	This statement has been removed from the table in the FEIS.
255.	City of Coronado, Office of the City Manager – James F. Benson	Section 3.6.2.3.3 indicates current Breacher Training operations are 14/day when an event occurs and an event occurs 20 times per year. The draft EIS notes operations will increase to 1,400 annually. How does the increase in activity affect the number of events per year and number per day so an assessment can be made regarding the degree of change on a daily,	As clarified in Section 3.6.2.3.3 of the FEIS, each of the 20 training activities takes approximately five days to complete, with an average of 14 shotgun blasts on each of those days. The number of shotgun blasts under the NAA is three. The

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		weekly, or monthly basis?	analysis in this section is based on this increased number.
256.	City of Coronado, Office of the City Manager – James F. Benson	Section 3.6.2.3.4 describes Amphibious Training operations increasing landings from 10,000 to 13,800 per year and LCAC activities (generating the most noise) will increase from 8 to 40 per year. The draft EIS identifies LCAC landings along with associated pile driving that occurs for at least 1 to 2 hours generating decibel levels of 74 to 104, 100' away. The draft EIS notes this activity has the potential to generate the largest number of increased complaints regarding noise and activity levels, particularly due to the proximity of the activity to Silver Strand housing and Silver Strand School. The draft EIS does not propose any mitigation, however, notes the training could result in sleep and communication disturbances. If the draft EIS acknowledges impacts, why aren't mitigation measures proposed? To state the Navy will advise surrounding agencies when potential impacts may occur is simply public notification and does not mitigate the related noise impacts. For example, could changes be made to the school to improve sound attenuation?	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities to achieve operational readiness while minimizing potential impacts to the surrounding area. The Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high visibility training events consistent with NBCINST 3502.1, dated 26 Mar 2008. Local governments, in turn, are responsible for informing their communities. The Navy is determining the best solution for notification to neighboring communities and, where appropriate, additional measures for alerting the adjacent communities about events that may be considered intrusive. The FEIS acknowledges that sleep or communication disturbances could occur occasionally, but concludes that the incremental effects of sound from the proposed training activities at SSTC would not have a substantial effect on the acoustic environment. Therefore, other than existing administrative controls on the placement of activities discussed in Section 3.6.1.6, no sound-related mitigation measures were proposed. With regard to changes to the school, a detailed evaluation of the existing school structures and operation (e.g., operable windows and locations of classes and other activities) would be required to determine whether its noise attenuation could be enhanced, but that is outside of the scope of the EIS since noise impacts were deemed not to be significant.
257.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS does not identify the entire Silver Strand as a State Scenic Highway and the Silver Strand (bay to ocean) as a Scenic Highway Overlay zone. The draft EIS should address the potential visual and environmental impacts associated with any new large equipment or improvements that would be visible along the Silver Strand. The City and Navy have worked cooperatively in the past to eliminate unnecessary signs, dilapidated training equipment, and vertical obstructions along the Silver Strand to improve the overall aesthetic improvement to the Silver Strand and assist with Least Tern and Snowy Plover preservation efforts.	The Navy has analyzed all potential Land Use and Socioeconomic conflicts within the ROI. The increase in proposed training activities will not result in a change in the public's visual experience because training is currently being conducted on the Silver Strand. There are no proposed changes in the view shed as the majority of the training events occur near the tideline or offshore in the bay training areas or ocean boat lanes.
258.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS proposes to institute beach sand berming activities, which negatively impacts the scenic highway and the public use of view corridors. For example, the berming of sand on SSTC has directly impacted the public in the past by blocking sunlight to the Solstice Clock feature in Natures Bridge (Silver Strand's Bayside Nature Trail). In December 2009, at the request of a group of citizens that meet for the winter solstice at this site, the City requested the Navy to lower the berm on December 21 so the sunlight could shine through to the Solstice Clock. The Navy was unable to accommodate this request but did not preclude this request from being	Section 3.2.3.2.2 indicates that, where training activities require natural beach contours to be altered, they are restored using bulldozers, to the extent practical, at the conclusion of the activity. These beach alterations occur above the high tideline to approximately 100 feet inland from the tideline and consist of low (2-3 foot) hummocks. Section 3.12.3.1.1 of the FEIS discusses past berming efforts that were related to least

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		accommodated in the future. The draft EIS should address how berming activities will be minimized to avoid the conflicts described in this example as well as other potential berming conflicts along the Strand. This could be addressed through an action plan that identifies how City and Navy communication will be coordinated and improved to ensure present and future berming activities along the Strand do not negatively impact the Scenic Highway.	tern recovery efforts.  No Navy berming efforts adjacent to Silver Strand Highway as are associated with the Proposed Action..
259.	City of Coronado, Office of the City Manager – James F. Benson	Several years ago, the Navy bermed up areas on the ocean side of NAB. This activity affected beach sand deposits in front of the Coronado Shores. It has also appeared to accelerate beach erosion at the south end of the Shores. The draft EIS does not address sand movement for training operations and impacts.	These beach alterations occur above the high tideline to approximately 100 feet inland from the tideline, and consist of low (2-3 foot) hummocks; any beach alterations not related to training, such as those referenced in front of the Coronado Shores, are not addressed in the SSTC EIS. Section 3.2.3.2.2 addresses the potential for impacts to soils from training activities. This section also indicates that where training activities require natural beach contours to be altered, they are restored using bulldozer at the conclusion of the activity to the extent practical. Thus, training units ensure that heavy equipment use on SSTC beaches has no long-term effect on beach sands.
260.	City of Coronado, Office of the City Manager – James F. Benson	Figure ES-I shows anchorage areas directly offshore of Coronado's Central Beach area, which are a direct encroachment into the public's view corridor. There are ample anchorage areas adjacent to Federal (US Navy) property; therefore, there is no necessity for anchorage areas for military craft as shown.	Anchorage's are displayed on the SSTC maps as they are shown on the NOAA Chart 18772 and Chart 18773. Anchorages are used for anchoring, towing, and mooring to buoy training, as well as anchorages for vessels support amphibious operations. The anchorages located with the ocean boat lanes are expected to be the most highly used anchorages. At these anchorages, vessels are expected to be present for training activities associated with the Proposed Action for up to four hours at a time, minimizing impacts to the public's view corridor.
261.	City of Coronado, Office of the City Manager – James F. Benson	Section 3.5.243 of the draft EIS indicates that, if all increased training activities were performed individually, there would be an 85% increase in the amount of time that portions of the bay and/or ocean would be closed to public use. The report also points out that if activities occur simultaneously, that percentage would decrease. Even with that, it is not clear how the public interest is served by this monopolization of ocean and bay use by the military. This proposed increase would have a definite negative impact on public use of these natural resources.	Section 3.5.2.4.3 has been revised to indicate that the area of water that would be closed for each training activity is relatively small when compared to total bay and ocean waters available for the uses described in the Basin Plan. In addition, the durations of most training activities would be short, usually less than one day. The public would have several alternate, equally suitable ocean and bay locations that it could use during training activities. In addition, the areas would not be permanently closed to public use; closures would be temporary, and areas would be reopened at the conclusion of training. Areas closed off to use would also change from training activity to training activity. Permanent loss of water use is not anticipated for any area of the ocean or bay. For these reasons, under Alternative 1, Navy training activities at SSTC are consistent with the Basin Plan.

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262.	City of Coronado, Office of the City Manager – James F. Benson	The City's beaches are already impacted by trash and other debris from a variety of sources. The draft EIS does not provide for any programs to mitigate the effects of the expanded programs adding to this trash and debris. The City is not aware of any current, ongoing program to clean the Navy's beach areas. The Navy's trash and debris, as well as that from other sources, accumulates on Navy property; tidal action and currents then deposit this trash and debris on public beaches. Expanded training activities will not only disturb buried trash and debris, releasing it into the environment; expanded water-based activities will re-suspend particulate debris deposited on the ocean bed. In summary, expanded training activities will likely lead to an increase in the amount of trash and other debris accumulating on Coronado's beaches in the area. The draft EIS should be revised to address these issues and mitigation.	The Navy recognizes its proximity to adjacent communities, and has attempted to structure its training activities and mitigation measures to achieve operational readiness while minimizing potential impacts to the surrounding area. Most of the training materials used at SSTC are non-hazardous, or are rendered non-hazardous when they function as designed (e.g., blanks). Trainees collect and remove expended materials to the extent practicable at the conclusion of their training events. Given the extent of recreational, commercial, research, and industrial operations in the ocean and bay waters adjacent to SSTC, however, a wide variety of non-military wastes accumulate on the training beaches. In the event that expended materials are found, contacting the POC at Naval Base Coronado will ensure that a team will arrive at the site, identify the item, and properly remove it.
263.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS refers to OPNAVINST 5090.1 in several locations; however, this document was not provided as an attachment. Some sections of the report indicate that the discharge of bilge water and grey water is not allowed; other sections of the report seem to indicate that this discharge is allowed under certain conditions. Discharge of grey water and/or bilge water from any Navy vessel in the training area should be prohibited for any reason.	OPNAVINST 5090.1 is cited in the FEIS as a reference, and thus it is not included as an attachment to the document. Additionally, sections have been revised to clarify that discharges of grey or bilge water are not allowed under any conditions.
264.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS describes training activities, which would include the creation of salt water ponds for temperature training. This ponded water would experience human contact for extended periods of time. Any ponded water used for this type of training should be tested to ensure that it meets established water quality standards prior to release back to the ocean and/or bay. The draft EIS should be revised to address this issue.	Section 3.1.1.4.3 of the FEIS indicates that this ponding of water typically occurs only on a single day, and would not experience human contact for extended periods. As indicated in the same section, water is not released directly into the ocean or bay, it percolates through the sand.
265.	City of Coronado, Office of the City Manager – James F. Benson	The draft EIS should further discuss, explain and analyze the permit for reverse osmosis water purification and unit discharge into the Bay and Ocean as discussed in Chapter 6 of the draft EIS.	Under current conditions discussed in Section 3.4.2.2 of the FEIS and under Alternative 1 and 2, wastes from training activities at SSTC include waste petroleum products, used coolants, various types of expended training materials, brine and backwash from the ROWPU training, and batteries. Most of these waste types are nonhazardous, some (e.g., batteries) may qualify as universal wastes (wastes that are not designated as hazardous wastes, but containing materials that need to be prevented from release into the environment), and some are hazardous under RCRA. Hazardous wastes are stored in satellite accumulation areas on SSTC and in a 90-day storage area at NAB Coronado, and transported along SR-75 by truck to regional hazardous waste TSD facilities. Chapter 6 indicates that a amendment request has been filed, but at this time, water from ROWPU activities is containerized and transported offsite for disposal.
266.	City of Coronado,	In the course of describing training activities, the draft EIS indicated that some running exercises	The SSTC Biological Opinion from the US Fish and Wildlife

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	Office of the City Manager – James F. Benson	would be performed with military working dogs traversing beach areas. Dogs are prohibited on the City's beaches, except for the area designated as Dog Beach, located at the northwest end of the City's Central Beach, near the Air Station's Ocean Boulevard gate.	Service outlines the constraints on military dog training on portions of SSTC-N and SSTC-S. Military dogs are not allowed outside of these areas until the Navy completes a study on the effects of military dogs on nesting birds. Section 3.11 of the FEIS clarifies that military working dogs "are typically on the hard packed sand (SSTC-S) or sand road (SSTC-N), they can also be on the soft packed sand in both areas."
267.	Department of Transportation of	<p>The California Department of Transportation (Caltrans) appreciates the opportunity to have reviewed the Draft Environmental Impact Statement (DEIS) for the Silver Strand Training Complex Project located along State Route 75 (SR-75) south of the City of Coronado. Caltrans has the following comments:</p> <p>The AM peak Intersection Volumes at Rendova Road is 3,328 with level of service (LOS) E. The AM peak and PM peak Intersection Volumes at Tarawa Road are 3,284 and 3,406 with LOS F. These two intersections LOS are exceeding Caltrans threshold to maintain a target LOS between "C" and "0". Any trips added to an intersection already operating at LOS F typically reduces the intersection measure of effectiveness (MOE operating capacity). A corridor segment or intersection currently operating at LOS F has reached its maximum effective operating capacity. Any additional trips added without maintaining the existing MOE's would further degrade the operational function and does not allow an intersection or segment to continue to operate within its capacity, as the segment or intersection has failed. Significant delays are expected at an intersection or roadway segment operating at LOS F. This should be documented as such in the EIS. The above intersections should also be analyzed for Existing plus Project to specify the significance of traffic generated by Marine activities additional trips.</p> <p>On page 3.14-4 to 3.14-5, the Rendova Road intersection operates at LOS E during the AM peak hour; and Tarawa Road intersection operates at LOS F for both AM peak and PM peak hour. Please revise.</p> <p>On page 3.14-5, section 3.14.1.4.2 Traffic volumes along Palm Avenue between 2005 and 2006 have decreased by 39%. The same applies for Table 3.14-4. Please revise.</p> <p>The Traffic impact Analysis (TIA) within the EIS did not address potential increase (or decrease) in pedestrian related trips at the analyzed intersections. The TIA should address the potential impacts that may occur as a result of any increase in pedestrian trips from Oceanside training to bayside training etc. Increased pedestrian trips can have a substantial impact on intersection operations, as the existing pedestrian crossing time may not be adequate to handle additional trips and may require the pedestrian crossing phase time to be increased to meet the added demand, thus lowering the overall capacity of intersections where this may occur. This would be especially important to know for the peak periods analyzed within the TIA.</p> <p>Any reduction in pedestrian trips during the peak periods that may increase the capacity of any</p>	<p>The LOS for Tarawa and Rendova have been added to Section 3.14.1.4.1 of the FEIS, and text has been added about the operating capacity of roads at a LOS F.</p> <p>The decrease in traffic volumes from 2005-2006 has been revised to 39% and amended in table 3.14-4.</p> <p>Regarding pedestrian increases in signal phase time, there are no new eating facilities or pedestrian destinations that would affect signal phases. There is no increase in personnel stationed at SSTC as a result in the implementation of the Proposed Action. The Proposed Action does include an increase in activities performed by existing personnel. The activities associated with the Proposed Action will be increased but will not increase the signal phase times at NAB intersections.</p>

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		<p>of the signalized intersections analyzed, such as new eating facilities on the beach side training facility, which would reduce the need for trips at the analyzed intersections would be helpful to note as well.</p> <p>Based on the inclusion of these revisions to the EIS, Caltrans has no further comments. If you have any questions or require further information, please contact Christian Bushong at (619) 688-2510 or Christian.Bushong@dol.ca.gov.</p>	
268.	Environmental Protection Agency, Region IX	<p>Water Resources Vernal Pools</p> <p>As stated in EPA's website (<a href="http://www.epa.gov/wetlands/types/vernal.html">http://www.epa.gov/wetlands/types/vernal.html</a>), "[m]ore than 90% of California's vernal pools have already been lost. Great efforts are being made to protect the remaining vernal pools, as their disappearance marks the loss of rare and important habitat and some of the associated plant and animal species as well." At the Silver Strand Training Complex South (SSTC-S), the vernal pools cover 3.2 acres in total (Table 3.11-1). Additionally, many contain endangered San Diego fairy shrimp "found in 11 of 25 vernal pools and salt marshes surveyed" (page 3.11-12).</p> <p>In the preferred alternative, the DEIS states on page ES-IO, "[t]he Navy would allow limited training involving foot traffic, but not vehicle traffic, in the vernal pools when vernal pool conditions are determined to be dry." The DEIS also states in Table 3.11-4, "[d]ry conditions would be determined by a qualified person overseen by a NBC [Naval Base Coronado] Botanist or Wildlife Biologist." While foot traffic in the vernal pools when the soil is dry and hard is unlikely to damage fairy shrimp, determining when the pools are dry enough for foot traffic is complex.</p> <p>Recommendation: EPA recommends the Navy work with U.S. Fish and Wildlife Service to identify the highest quality vernal pools, and fence those to minimize impacts from training. Alternatively, EPA suggests</p>	<p>The Navy's analysis was based on the best available science; however, there is inherent variability and uncertainty in occupancy of the vernal pools. For this reason, the Navy does not know the impact of introducing training to this area. As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation</p>

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		<ul style="list-style-type: none"> <li>• the FEIS commit to an inspection of vernal pools by a wildlife biologist, prior to upland training at beach Purple 2, or</li> <li>• the FEIS list the factors that will be used to determine the vernal pools are dry enough to withstand foot traffic'.</li> </ul>	<p>with the USFWS.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p>
269.	Environmental Protection Agency, Region IX	<p>Water Resources Sediment Quality</p> <p>The DEIS states on page 3.5-14, "[r]ecent sediment sampling in the San Diego Bay near SSTC-N indicates - while concentrations of some contaminants are elevated above background levels - no contaminants were present at the concentrations which would adversely affect marine organisms (Port of San Diego 2002)." EPA encourages a fuller discussion of sediment sampling results near SSTC-N and any screening levels used to determine that no contaminants were present at concentrations of concern. The purpose of the sediment sampling in the report cited (San Diego Harbor Deepening EIS/EIR, USACOE, November25, 2002) most likely was intended to characterize the quality of the sediment to be dredged, and may not have specifically addressed the sediment at SSTC-N. Even more so than dredging, underwater explosions are likely to make contaminated sediments bioavailable to fish and marine mammals.</p> <p>Recommendation: The FEIS should provide additional discussions of sediment sampling at SSTC-N, including a brief description of the number of samples, depth of sampling and contaminant concentrations.</p>	<p>The sediment sampling for the San Diego Harbor Deepening project was, as indicated in the comment, performed not to identify contaminant hotspots but to characterize the general quality of a large quantity of Bay sediments intended for ocean disposal. Such samples are likely to be more representative of general conditions in the Bay than samples collected in known or suspected contaminant hot spots. The Navy is not aware of any other relevant sediment sampling in the vicinity of the SSTC training areas.</p>
270.	Environmental Protection Agency, Region IX	<p>Biological Resources Least Terns</p> <p>The DEIS discusses physical training for groups averaging 30 - 150 people (Table 2-1, page 2-24), and includes that "trainees may occasionally have a military working dog participate in the physical conditioning." Page 3.11-39 also clarifies that military working dogs "are typically on the hard packed sand (SSTC-S) or sand road (SSTC-N), they can also be on the soft packed sand in both areas." While federal endangered least terns may have acclimated to the presence of humans nearby, barking dogs in nesting areas does not seem prudent, particularly when exercise in the nearby hard packed sand would be much less intrusive.</p>	<p>As listed in Section 5 and as described in the signed Biological Opinion (July 7, 2010) from USFWS, military working dog handlers will be notified weekly of the locations of plover nests and, to the maximum extent possible, remain a minimum of 30 m (90 ft) from markers that delineate the locations of nesting plovers. Outside of the nesting season (15 Sept through end of February), training may occur unencumbered.</p>

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		<p>Recommendation:                      The FEIS should include a mitigation measure that avoids conditioning military working dogs in least tern nesting areas (i.e. the soft packed sand of Blue 2, Orange I and Orange 2).</p>	<p>If physical conditioning on soft pack sand is necessary, handlers and military working dogs will run on the sand road (SSTC-N) or within 20 feet of the hard pack sand to reduce the disturbance and impact to nesting terns and plovers. At SSTC-N, military working dogs will exercise primarily between beach lanes Yellow 1 and Blue 1, where they may cross the beach to get to the sand road at the existing route immediately to the north of the demo pit. The Navy will not conduct physical conditioning using dogs in the southern three beach lanes until: a) completing a study to evaluate the effects of military working dogs on terns and plovers and b) coordinating with the USFWS to develop conservation measures to minimize any additional effects.</p> <p>If military working dog training is requested as part of Platoon Over-the-Beach activities at SSTC-N, these activities will be scheduled in beach lanes Yellow 1, the northern half of Yellow 2, Green 1, or Green 2, pending the results of the Navy’s study to evaluate the response of terns and plovers to military working dog presence.</p> <p>The Navy will coordinate with USFWS in the development of the study to evaluate the effects of military working dogs on terns and plovers and will submit the study design and scope of work to USFWS for review and approval. The Navy will allow USFWS 30 days to submit comments and an additional 30 days to approve the final study design and scope of work.</p>

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271.	Environmental Protection Agency, Region IX	<p>Waste Minimization</p> <p>EPA recognizes the Naval Region Southwest's commitment to sustainability, including renewable energy, water conservation, green buildings and more. We commend the Navy for "pumping seawater through its Offshore Petroleum Discharge System during training, instead of using petroleum products." In comparison, the DEIS does not explain whether a high level of scrutiny has been applied to the explosive training exercises, although it does identify potential munitions constituents of concern and explosives residue (on page 3A-I 0 and 11). EPA acknowledges that in many instances the success of training exercise may not be judged without using the actual amount of explosive also used in field conditions, however, that may not be the case for all explosives training exercises.</p> <p>Recommendation:</p> <p>The FEIS should assess the potential to reduce explosive charges in meeting its training needs.</p>	<p>As discussed in Section 2.1.3.3 of the FEIS, a reduction in underwater mine countermeasures was considered but eliminated because it would not support the Navy's ability to meet training requirements consistent with the Fleet Readiness Training Plan (FRTTP) (criteria #2 and #6, Section 2.1.2 of the FEIS). A reduction in the types, or tempo of training activities available at SSTC would mean that local units and users would have to routinely travel to other range complexes to fulfill training requirements. As outlined in Section 2.1.3.1 of the FEIS, this is not a feasible alternative. For these reasons, this alternative has been eliminated from further consideration in the EIS.</p>
272.	Environmental Protection Agency, Region IX	<p>Clarification of Baseline Training Tempo</p> <p>Various sections of the DEIS provide information on baseline training tempo, including Table 2-1. EPA encourages a more thorough discussion of the development of the baseline training tempo, to clarify the concept. The FEIS should, for example, explain whether the values in Table 2-1 represent the amount of training conducted in a specific year or the amount of training that could be conducted given the current restrictions on training. Where the baseline training tempo is not reflective of recent training activities, EPA suggests the FEIS include a comparison with recent training activities. This will foster better understanding of the FEIS. EPA is not suggesting additional factors need to be used for comparison throughout the FEIS, only that it should link training tempo to recent levels of training at SSTC.</p>	<p>The tempo and types of training activities have fluctuated within SSTC due to changing environments, 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. The factors influencing tempo and types of operations are fluid in nature, and will continue to cause year-to-year fluctuations in training activities at SSTC.</p> <p>The Navy established its baseline training tempo by considering available historical usage data at SSTC, specifically, from 2001 through 2007. During this period, the U.S. military commenced operations in Afghanistan and Iraq as part of the Global War on Terror. Many of the units that would normally be training at SSTC were deployed overseas. Additionally, the focus of the individual and unit training temporarily shifted to inland (desert or mountainous) environments to prepare personnel for conditions they would encounter in combat operations overseas. As such, SSTC has experienced a temporary decrease in training usage and tempo during the period being evaluated (2001 through 2007). To</p>

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			<p>establish baseline training tempos, the Navy evaluated available 2001 through 2007 training data, considering year-to-year fluctuations as well as the recent progressive decline in training tempo at SSTC. For each training activity, the Navy selected 2001- 2007 data that were most reflective of the average historical training conditions over the past few decades.</p>
273.	Federal Emergency Management Agency, Region IX	<p>Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County of San Diego (Community Number 060284), and Cities of Coronado (Community Number 060287) and Imperial Beach (Community Number 060291), Maps revised September 29, 2006. Please note that the Cities of Coronado and Imperial Beach, San Diego County, California are participants in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.</p> <p>A summary of these NFIP floodplain management building requirements are as follows:                      All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and AI through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.                      If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any development must not increase base flood elevation levels. The term development means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials. A hydrologic and hydraulic analysis must be performed prior to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.                      All buildings constructed within a coastal high hazard area, (any of the "V" Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.                      Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall</p>	<p>Thank you for the list of references that should be reviewed. Because the EIS only analyzed activities associated with training at SSTC, of which there are no development or construction activities, the information that you have provided has been forwarded to the appropriate personnel and will be consulted prior to any future construction or development activity.</p>

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		<p>notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <a href="http://www.fema.gov/business/ntip/forms.shtm">http://www.fema.gov/business/ntip/forms.shtm</a>.</p> <p>Please Note: Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements.</p>	
274.	San Diego County Archaeological Society, Inc.	<p>1. The DEIS describes actions the Navy routinely takes to avoid significant impacts to cultural resources, such as notification of restrictions prior to activities. What actions does the Navy take to audit the effectiveness of impact avoidance? Is there a periodic monitoring or inspection program, with provision for remedial action should any problems be identified?</p> <p>2. The DEIS considers potential impacts to ground-disturbing activities "in the immediate area of an archaeological site" (see Section 3.13.2). It does not address the possibility of such activities impacting buried sites. A monitoring program is warranted for areas where previously-undisturbed subsurface areas will be subjected to excavation, grading or similar disturbances. Both archaeological and Native American monitors need to be part of such a monitoring program.</p> <p>3. Please explain where the collections from previous archaeological investigations on the SSTC are curated. An inspection of the listing of curated collections at the San Diego Archaeological Center identified none of the sites listed (other than an apparent error for SDI-13968, which is listed for a site inventory project on Camp Pendleton). Are the collections curated at another facility meeting the requirements of 36CFR79? If not, what actions will be taken to bring their curation status into compliance with 36CFR79?</p> <p>SDCAS appreciates the opportunity to participate in the navy's environmental review process for this important project.</p>	<p>1 - Under existing management protocols of the NB Coronado Cultural Resources Management Program (CRMP), periodic inspections are conducted of all NB Coronado installations, including the SSTC, to monitor land use on areas of known archaeological sensitivity. Similarly, CRMP personnel frequently conduct project-specific inspections and joint site visits under the NB Coronado Site Approval Request (SAR) process. Both monitoring processes are prescribed under stipulations of the 2003 San Diego Metro Area Programmatic Agreement (Metro Area PA). Any problems or conflicts noted during monitoring are reported to the responsible NB Coronado command authority and addressed administratively. Professional investigations have identified eligible and potentially eligible properties within the CNRSW Metro ROI. In conjunction with ICRMP development and as future investigations, CNRSW will determine if additional properties in the Metro ROI not previously evaluated may be eligible. CNRSW will ensure that all new construction, alterations, equipment installation, structure modifications, or repairs and maintenance on land, buildings, or structures will be reviewed for potential effects to historic properties.</p> <p>2 - By prescription, this EIS limits its analyses to operational training activities. Construction activities related to the</p>

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			<p>development of infrastructure supporting operations or other systems on the SSTC, maintenance and repair on existing infrastructure, or the demolition of facilities, will be processed separately and individually under NEPA. These supplemental NEPA reviews are processed through the NB Coronado PWO, where they will be subject to application of historic preservation review by the CRMP Archaeologist under the Metro Area PA. Stipulation 9 of the Metro Area PA provides that the CRMP “will ensure that ground-disturbing activities include appropriate measures to protect archaeological resources,” including, as appropriate, “archaeological monitoring of ground disturbing activities within areas of known or provisional archaeological sensitivity.”</p> <p>3 - Collections deriving from SSTC sites are of limited value, in part due to the nature of the testing projects involved, but also related to the content or condition of the site areas tested. For instance, the site CA-SDI-13968 referenced in the comment is a remnant prehistoric deposit located in the southeastern quadrant of SSTC South, where its original extent has been bisected by the construction and reconstruction of SR75 beginning in the early 1940s. Archaeological testing there in 2001 was limited to the alignment for the eventual burial of overhead power lines with the goal of assessing if any intact site deposit might lie below the incised SR75 road shoulder. The testing determined that the underlying soil was the undisturbed, sterile native geology, and no testing was applied to other, less disturbed areas of the recorded site away from the proposed trenching. Accordingly, no collections were forthcoming from testing this particular locus. Other testing conducted during the 2001 effort at sites CA-SDI-5514 and -5454/12270 produced a small volume of collections which remain in the custody of the consultant pending Navy funding to archive these at the SDAC. Such funding has become available in FY10, and these materials are expected to be moved to the SDAC in Summer 2010. Site eligibility evaluation testing conducted in 2006 on recorded sites CA-SDI-57, CA-SDI-13964, CA-SDI-13966, CA-SDI-13969, and CA-SDI-13972 produced a minimal quality of materials which were determined to derive from very disturbed contexts and lacked any integrity of their origin. These were not added to any collections.</p>

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275.	San Diego Audubon Society	<p>The San Diego Audubon Society is very concerned with the proposed project. We greatly appreciate the current efforts of the Navy to protect and enhance the safe nesting of California Least Terns and Western Snowy Plovers on the Silver Strand. Section 5.11.1 is a very interesting history of Navy environmental responsibility and leadership. We also appreciate the expanded training needs for the Navy because of our Nation's current high level of military activity. However, we think that the plan needs to be more protective than the current Alternative 1 or 2. Therefore we support the No Project alternative unless Alternate 1 can be improved substantially. We strongly urge that Alternative 2 not be selected because of its large and irresponsible impact on least terns and snowy plovers. The San Diego Audubon Society also supports the Bay Council letter to which we are a cosigner.</p>	<p>The models developed to assess impacts to the California least tern and western snowy plover from proposed military training have been improved, in response to the Audubon Society and other public comments that have been received (see Sections 3.12.3.1 and 3.12.3.2 of the FEIS). The models and analysis now also consider historical take levels and estimate average future take levels, in addition to overly-conservative take levels. The improved models anticipate that impacts to the California least tern and western snowy plover will be minimal under both the No Action Alternative and Alternative 1, and will be mitigated through the Navy's extensive management program.</p>
276.	San Diego Audubon Society	<p><b>IMPACTS ON LEAST TERNS</b>                      The population of Least Terns has risen substantially over the last 15 years, as the EIS shows. But, the reproduction of Least Terns has generally been declining over the last decade as the EIS also shows. This suggests that the species is not doing nearly as well as it looks. It is also thought that the average age of the birds is increasing, which could reduce future reproductive success. This is clearly not a good time to increase the take of the species, particularly when that take is avoidable. We will be more specific in the following subheadings.</p> <p><b>CUMULATIVE IMPACTS NOT ADDRESSED, LEAST TERNS</b>                      The EIS provided a long list of likely activities for which the cumulative impacts have been addressed. We are concerned that several very relevant activities were not addressed that, when combined with Alternative 1 or 2 could help put the recovery, and perhaps even the survival of the species in jeopardy.</p> <p>The U.S. Fish and Wildlife Service has proposed downlisting the least terns from Endangered to Threatened. This would reduce the priority for funds, for priority for other resources such as locations for new nesting areas, negotiating site management agreements, predator management, protection and enhancement of the fish needed for foraging, research, monitoring, planning, analysis, site maintenance, etc. This reduction in resources and priorities will take a toll on the species, in both predictable and unpredictable ways.</p> <p>Global Climate Change appears to be making the quantity and timing of the supply of small fish for least tern consumption more variable and more uncertain. This affects the likelihood that chicks will survive. Changes are happening very quickly which could leave the entire population more vulnerable.</p> <p>The impacts of Gull-bill terns on tern reproductive have been significant and appear to be increasing. There appears to be no real progress toward identifying how to manage the two</p>	<p>Downlisting the least tern does not affect Navy funding priorities in its INRMPs - Endangered and Threatened species are classified with the same funding priority. The Navy is contributing to research on climate change and least tern foraging habits in San Diego Bay. Gull-billed tern predation studies are also underway by the Navy and other funders (including USFWS), and the Navy has requested approval from USFWS to relocate Gull-billed terns, without success. A species viability analysis is under consideration for funding. The USFWS has not officially proposed the California least tern for downlisting. If and when it does, the proposal will be published in the Federal Register and will be open for public comment before a final decision is made.</p> <p>The Navy is working closely with the USFWS to assist it in addressing gull billed tern predation and impacts to western snowy plover and California least tern. The Navy has submitted an application for a depredation permit to the USFWS Division of Migratory Bird Management annually since 2005, and has continued to document the impacts of this species. The Navy is supporting a radio-telemetry study by SDSU and USFWS during the 2010 nesting season. This study will research movements of gull billed terns around San</p>

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		<p>species to assure the recovery of least terns. This lack of resolution is likely to result in a large and unmanaged take of least terns for at least several years while regulations are developed, reviewed, and finally implemented.</p> <p>The Recovery Plan for least terns is almost three decades old and is based on outdated information. As a result, there is no effective comprehensive and broadly accepted plan for the recovery of least terns. This deficiency in planning and management means that there is no valid way to conclude that the additional take proposed by Alternatives 1 or 2 will not help put the species in jeopardy.</p> <p>We urge that the EIS acknowledge each of the additional cumulative impacts mentioned above and incorporate their effects into its analysis.</p>	<p>Diego Bay and analyze diet.</p> <p>The Navy agrees that the California Least Tern Recovery Plan needs to be updated to address current concerns facing California least tern recovery efforts. As listed in the FEIS and in the signed USFWS Biological Opinion (July 7, 2010), the Navy supports the USFWS with annual site specific data and monitoring of the least tern on Navy property. The Navy also encourages the USFWS to update the Plan so that the Navy, as an agency responsible for working towards recovery, can understand how to best attain this important goal. The Navy intends to continue vigilant and adaptive management of least terns, and as well as monitor take. Take will be monitored and course adjustments made.</p>
277.	San Diego Audubon Society	<p><b>SPECIES VIABILITY ANALYSIS, LEAST TERNS</b></p> <p>The Species Viability Analysis is based on reproduction rates measured in 1981 to 1984, according to page 3.12-21. At this time the productivity was 0.62 fledgling per nest in good years and 0.27 for years dominated by El Nino/Southern Oscillation (ENSO). The ENSO influence was expected about one out of seven years.</p> <p>According to a figure in the handout from the public presentation, in the last 8, the good years have had productivity around 0.15 for the good years and 0.05 for the bad ones. It appears that we have had 8 bad years in a row vs. the one bad year in seven anticipated in the Species Viability Analysis.</p> <p>As mentioned above the Species Viability analysis assumes one ENSO year for every 7 normal years. However, some climate models now suggest that with global warming the average may become more like the ENSO state which will make least tern reproduction more difficult.</p> <p>The model also does not address other trends that could increase the risk to the food supply for least tern recovery such ocean warming, reduced oxygen levels in the ocean, and ocean acidification. Each of these issues suggests that the Species Viability Model is probably wildly optimistic.</p> <p>We urge that this EIS not conclude that a lower population of least terns will not jeopardize the recovery of the species unless that conclusion can be substantiated with current and relevant data and the best analysis of future trends. Such an analysis should also incorporate the effects of the cumulative impacts listed previously in this letter. Any model used should include the</p>	<p>The Navy understands the problems with the model. Efforts to model least tern population viability have been frustrated by incomplete information about the species' demography, effects of environmental stochasticity, and wintering habitat location. An update of the Species Viability Model is needed; however, it is currently the best available science. The Navy sees its responsibility as contributing to recovery. The FEIS attempts to quantify the benefit provided by the Navy of its personnel dedicated primarily to this program and onsite maintenance and monitoring. The Navy is no longer relying solely on the model to conclude that minimal additional impacts to California least tern and western snowy plover are expected under the Proposed Action. The Navy may be required under the Biological Opinion to re-initiate consultation with USFWS if the population of California least tern or Western snowy plover on NBC decline below 2005-2009 baseline nesting levels and Navy and USFWS evaluations determine that the decline is due to the impacts from of military training.</p>

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		<p>uncertainty range of the input information, the uncertainties of the assumptions the model is based on, how the uncertainties propagate through the model, and the uncertainty of the results. A model that produces a number without clear quantification of the uncertainty of that number will probably be more misleading than useful.</p> <p>The species viability analysis only appears to address keeping the species from declining to extinction. The purpose of the Endangered Species Act is recovery. This analysis needs to be redirected to identify a population and population growth rate that will lead to a high probability of recovery of CA least terns in a reasonable period of time.</p>	
278.	San Diego Audubon Society	<p><b>IMPACTS ON WESTERN SNOWY PLOVERS</b></p> <p>The EIS proposes a maximum number of 22 Snowy Plover nests that will be marked for protection. Other nests, eggs, and chicks will be unmarked. As they are very well camouflaged the destruction of a large number of chicks and eggs appears likely. The EIS fails to provide any analysis to quantify the likely number of unmarked nests, eggs, and chicks in the lanes would be destroyed accidentally. But it concludes that this will not be a significant impact with no data or analysis to support this conclusion.</p> <p>From 2005 to 2009, Snowy Plover population on the West Coast has declined about 13%. The Recovery Plan emphasizes the need for increased protection of nesting areas to allow recovery. Backing off on protection of these nests appears to be a significant risk to the viability of this species and directly contradicts the recommendations of the Recovery Plan.</p> <p>EIS also fails to provide any direct mitigation for the losses of Western Snowy Plovers that will be caused by this project as is required by NEPA. Ironically the protection of these three lanes during nesting season was provided as mitigation for the losses that were anticipated for the other 11 lanes. In view of this, If this project is implemented, we strongly urge that the EIS provide estimates of anticipated losses of WSPs from the training operations on all of the 14 Silver Strand project area and provide adequate mitigation to directly offset those losses in all 14 lanes.</p>	<p>The Navy does analyze expected take of chicks in worst case and No Action scenarios. The numbers are not a population-level effect, and so they will not affect the viability of the species. Measures are in place to ensure long-term viability of Navy sites for nesting, and for adaptive management. Mitigation for any losses is provided through management, including predator control and site enhancement. It is true that most of the western snowy plover benefit has occurred incidental to California least tern protection. The Navy has conducted an additional impact analysis for western snowy plover. The analysis found that the likelihood of unbuffered western snowy plover nests being impacted by military training is low even though they are well camouflaged (Section 3.12.3.2 of the FEIS). The Navy has provided additional information about its proposed mitigation. Proposed mitigation is expected to well-compensate for the few nests that could be lost under the revised buffering criteria. The Navy is working closely with the USFWS to assist it in addressing gull billed tern predation and impacts to western snowy plover and California least tern. The Navy has submitted an application for a depredation permit to the USFWS Division of Migratory Bird Management annually since 2005 and has continued to document the impacts of this species. The Navy is supporting a radio-telemetry study by SDSU and USFWS during the 2010 nesting season. This study will research movements of gull billed terns around San Diego Bay and analyze diet.</p>

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279.	San Diego Audubon Society	<p>BIOLOGICAL OPINION NOT AVAILABLE</p> <p>The Biological Opinion from the US Fish and Wildlife Service will have an important impact on the future of this project. It is inappropriate that the public must review this EIS without seeing the final Biological Opinion for the project. The BO would provide additional information and the opinion of the FWS. It is essential that reviewers be able to review this opinion and its background information and see how the Navy intends to deal with that opinion.</p> <p>We strongly urge that the DEIS be re-circulated for comment after the BO is received, its results are integrated into the project, and the mitigation is identified. This transparency is especially important for this project in view of its large potential impacts on two very important at-risk species. If the public is only allowed to see this information in the FEIS, there will be no formal comment period, and the public will have been denied the intended benefits of the NEPA process.</p>	<p>The information and mitigation measures from the signed Biological Opinion (July 7, 2010) have been incorporated into the appropriate sections of the EIS, including the conclusion.</p>
280.	San Diego Audubon Society	<p>IMPACT OF NOISE AND DISTURBANCE ON LEAST TERNS AND SNOWY PLOVERS</p> <p>We were pleased to see the substantial analysis of the average and peak noise resulting from the project in Section 3.6, ACOUSTIC ENVIRONMENT. But we were extremely disappointed to discover that the noise analysis was only related to "sensitive receptors" of the human kind. The EIS provides no analysis to determine if the increases in average noise or peak noise from the increases in gunfire, flares, and detonation would result in a take, or a reduction of reproductive success, of least terns or snowy plovers. This loss could result from either least terns or snowy plovers being deterred from nesting or abandoning eggs or chicks because of the additional noise, either on the ocean side or the bay side of the Silver Strand.</p> <p>We strongly urge that the EIS include analysis of the indirect take of chicks and eggs that will result from permanent nest abandonment that is likely to result from the increase in noise, both average and peak. We also urge that the EIS include analysis of the indirect take of chicks and eggs that is likely to result from temporary abandonment that would make the eggs and chicks more vulnerable to death from heat, cold, predators, and starvation.</p>	<p>The Navy agrees that the California Least Tern Recovery Plan needs to be updated to address current concerns facing California least tern recovery efforts. The Navy supports the USFWS with annual site-specific data and monitoring of the California least tern on Navy property. The Navy also encourages the USFWS to update the Plan so that the Navy, as an agency responsible for working towards recovery, can understand how to best attain this important goal.</p> <p>This is a high ambient noise environment in which nesting persists. The Navy has achieved nesting success adjacent to the North Island airfield, which is a very high noise environment. The FEIS addresses noise and its effects on the least tern and snowy plover.</p>

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281.	San Diego Audubon Society	<p><b>ALTERNATIVES</b></p> <p>The limited range of alternatives that are presented in the EIS do not provide a reasonable starting point for a productive process to resolve the project’s operational and environmental problems. The lack of meaningful alternatives is not consistent with the letter or intent of NEPA. We urge that the EIS alternatives be expanded to lead to a reasonable solution to the Navy’s training issues.</p> <p>The EIS needs to provide an alternative that identifies scheduling efficiencies that will preserve the land portion of blue 2, orange 1, and orange 2 during nesting season. A very large portion of the use of the training area is for physical fitness training which provides considerable opportunities for more efficient use of the area. The EIS’s allegation that expanding operations into those three lanes is essential to the mission is not supported by any specific information provided in the EIS.</p> <p>Many of the missions that are proposed can be accomplished in the water section of the lanes, with virtually no beach access. We urge that the uses of lanes blue 2, orange 1, and orange 2 be limited to those water-only missions during nesting season. Needed access for them could be by boat vs. land. If emergency access is occasionally needed over the beach, that could be considered valid unavoidable "incidental take." Such an alternative should be developed and analyzed.</p> <p>We also urge that an alternative be analyzed that allows lanes at Camp Pendleton to be used to relieve some of the scheduling pressure on the Silver Strand Beach Lanes without destroying least tern and snowy plover eggs and chicks.</p> <p>We strongly urge that a set of meaningful alternatives be identified that will address the Navy’s training needs in a much more environmentally protective manner. Such an alternative is essential to satisfy the letter and the intent of NEPA.</p>	<p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3 of the FEIS. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible. Alternative locations for training, such as Camp Pendleton were analyzed, and found not to meet the military training needs (Section 2.1.3.1 of the FEIS). Additionally, alternatives were eliminated that investigated the distribution of military activities to different locations within SSTC.</p> <p>While the Navy appreciates your recommendation for public assistance in rehearsals, the general public is prohibited from participating in these training activities for both military security and public safety. An explanation of why the Navy needs to use Lanes 8, 9, and 10 is provided in Sections 1.5.1.1, 1.5.1.2, 1.5.1.3, and 3.12.3.1 of the FEIS.</p> <p>All alternatives in the EIS propose scheduling efficiencies that reduce the potential for take of listed species. As discussed in Section 3.12.1.5.3 of the FEIS, beach scheduling procedures bias activities with heavier beach usage towards beach lanes with fewer nests, when it does not impact the realism of training or training needs. This means that heavy impact training would be preferentially scheduled in the Yellow and Green beach lanes where nest numbers are low. Water-borne activities that have no beach requirements or impacts would be preferentially scheduled in Lanes 8, 9, and 10. Even if a beach activity were to be scheduled in Lanes 8, 9, and/or 10, it would be expected to be an activity with a small footprint and low impact on nesting birds. Section 3.12.3.1.2 of the FEIS further discusses these mitigative effects of this scheduling efficiency.</p>

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			<p>Also, while not explicitly stated, physical fitness activities are typically planned for areas with minimal nesting: in the obstacle course on Yellow 2, on the sand road paralleling Highway 75, paralleling the ocean along the high tide line, and in designated crossing lanes between the sand road and the tide line. As stated in the EIS, these activities can typically work around nests. For these and other reasons discussed in Section 3.12.3.1.2 of the FEIS, impacts to nesting birds in Lanes 8, 9, and 10 are expected to be minimal.</p>
282.	San Diego Audubon Society	<p><b>MITIGATION FOR LEAST TERNS AND SNOWY PLOVERS</b>                      The mitigation measures for the impacts of this project are defined in section 12.4.1: "Develop a site enhancement plan that includes establishing dunes on the windward edges of Delta North and South that would enhance this area for plovers, create a source of sand for the least tern nesting area, and establish a better visual barrier between SR-75 and the nesting colony."                       It is not clear what is meant by "Develop a site enhancement plan" Does that mean that the enhancement would actually be built? How big? When would it be built? Would it be in place and functioning before Alternative 1 or 2 would be implemented? Would it be maintained in perpetuity, or just constructed? This sort of information about the scale and viability of the mitigation should have been a major element of the EIS.                      We would appreciate habitat enhancements. But, is it anticipated that these measures would result in an improvement in productivity in terns and plovers that would offset the anticipated direct and indirect take that would result from Alternative 1 or 2? It appears very doubtful that it would. One of the purposes of the EIS is to identify the net impact of the project with the mitigation. This EIS does not identify the impact and it does not identify how much of that impact is offset by the mitigation. It fails to provide the fundamental elements of an EIS.                       A better visual barrier between SR-75 and the nesting colony will also mean a better approach path for avian predators to approach the tern colony without being detected. We doubt that will improve the productivity of the colony. Thus it does not appear to have any value as mitigation. Section 12.4.2 states: "Vehicle patrolling and LARC V operator training will not occur in Red, Blue, or Orange Beach Lanes." How many least terns or snowy plovers will this save? Will the terns and plovers that are saved by this measure survive the other activities that will occur in these lanes under Alternatives 1 and 2? It does not appear that they would. Again, the EIS fails to identify the impacts of this measure, which is one of its main purposes.                       The two mitigation measures in the EIS may tend to reduce or offset the take a little, but they do not appear to minimize or to offset the impacts of the Project. If Alternatives 1 or 2 are adopted in spite of their inappropriate impacts, we urge that mitigation be provided that will actually offset the take that results from those actions.</p>	<p>The addition of sand is contemplated as a principal element of the site enhancement plan to make the historically designated nesting areas more attractive for nesting terns and more secluded from the road. Vegetation management of the dunes (removal of iceplant with some replacement by native species) will increase the carrying capacity for terns and plovers. Accounting will take place through monitoring of take and reproductive success. The Long Term Site Enhancement Plan which is part of the Proposed Action could increase the carrying capacity for terns by hundreds of nests. For snowy plovers, the long-term site enhancement plan is estimated to realistically mitigate for an estimated 34 nests annually. The FEIS quantitatively estimates the amount of benefit provided by Navy management above and beyond that required by past projects, and that can be considered avoidance, minimization, and offsetting measures related to training.                       Besides setting aside real estate, the most important mitigation measure is probably predator control. The Navy has a number of predator management and control measures that it implements throughout the breeding season to minimize impacts of predators, including avian predators, ants, and mammals (see Section 3.12.1.5.3 of the FEIS for more detail). Predator control is considered by many species experts to be one of the most crucial management strategies for reproductive success (Foster 2006; USFWS 2006c). Without the Navy's predator control program, the SSTC nesting sites would likely</p>

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			<p>have substantial reproductive failure. This predator control program has allowed for and is expected to continue to promote over one thousand nests that are annually found on SSTC-N.</p>
283.	San Diego Audubon Society	<p>The EIS does not indicated that any accounting will be done to identify how much of the environmental impact of the project is expected to be offset by the mitigation. How would a regulator or decision maker be able to identify how much environmental impact has occurred and how much has been offset by the mitigation over time? We urge that the EIS provide how such an ongoing net impact assessment will be accomplished to facilitate the adaptive management process that is mentioned.</p> <p>If the project results in a substantial increase in a net take, or if the viability of the terns and plovers begins to diminish, will the project include additional specific mitigation measures to restore protection of the nesting at the three lanes or more to offset the loss? Though adaptive management is suggested, there are no specifics of what is meant by it for this project.</p> <p>It appears that there are areas in the SSTC South area that could be used to mitigate for the impacts of this project that would be difficult and costly to use for training. We urge that the Final version of this document explore that possibility.</p>	<p>The Navy has proactively prepared for the expected take through site enhancement, management of lane usage, nest protection, monitoring, and decades of adaptive management. In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1) and the western snowy plover (Section 3.12.3.2) to provide a more in-depth analysis of impacts that training is expected to have on the species. Mitigation measures have been added to the Proposed Action. The benefits of current and proposed mitigation are also described and quantified as far as practicable. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. The Navy works each year on site-maintenance and monitoring, plus periodic site enhancement or management approaches to manage terns, and to increase attractiveness of Delta beaches. The discussion originally presented in the DEIS has been updated in the FEIS (Section 3.12.3.1) to explain the level of loss anticipated under the No Action Alternative compared to that under Alternative 1, estimated to be an increase of seven nests, on average, in a typical year for least terns. The difference in incidental take for snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year. The Navy will ensure that biological monitors look for and document the locations of least tern or snowy plover nests, eggs, and chicks prior to and after all military training exercises, to allow for the assessment of take associated with training activities.</p> <p>The Navy believes it has already fully mitigated for training impacts. The Navy, in response to your and other comments, has attempted to analyze the beneficial impacts of proposed</p>

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			<p>mitigation. Some of the mitigation has impacts that are interconnected with many other factors, and can only be discussed qualitatively. Where possible, the Navy attempted to quantify the beneficial impacts of the proposed mitigation. The Navy has determined (see Sections 3.12.3.1 and 3.12.3.2 of the FEIS), that the proposed mitigation will well offset the anticipated take of listed bird species on SSTC associated with military training.</p> <p>The Navy conducts frequent and routine monitoring of the nesting sites and regular dialogue with the USFWS on the status of listed birds nesting on SSTC. If changes in the population of nesting listed bird species occur on SSTC, the Navy and USFWS will work together to determine the reason for the change in population, and will reinstate consultation if appropriate.</p> <p>There are no areas on SSTC-S that are not used for training, except for the vernal pools and the area leased to Camp Surf. All of these areas will continue to be needed under all three Alternatives.</p>
284.	San Diego Audubon Society	<p><b>IMPACTS ON DIVING BIRDS</b>                      We appreciate the analysis that was performed relating to the impacts of underwater detonations on diving birds and marine mammals. However, we have not had the resources to verify the data, rationale, or conclusions at this time. We also appreciate the plan to discourage diving birds from the exercise area to prevent injuries or death to them.</p>	Your comment has been noted.

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286.	San Diego Audubon Society	<p>PROTECTION OF SENSITIVE PLANT SPECIES                      We do not think that the protection of sensitive dune and upland species proposed by the EIS is adequate, but have not had the resources to comment specifically on them at this time. Volunteer from our chapter spend many hundreds of hours removing invasive vegetation to provide habitat for some of these sensitive plant species. It is disappointing to hear that there will be no protection for these sensitive species in this project.</p>	<p>Rare plant surveys for all plants identified in the EIS, and others, have been completed. The Navy has an invasive species control program that directly benefits sensitive plant species. The naturally disturbed dune environment and the plants adapted to it benefit from Navy invasive species control. Upland rare plants are locally relatively abundant, and benefit from annual invasive species control and monitoring. Some benefit occurs through restoration that primarily involves weed control. Avoidance and minimization measures are implemented at the Delta beaches for plants identified as rare by the California Native Plant Society as List 1B or higher. The Navy conducts annual surveys and treatment for invasive plants and, in recent years, has been expanding treatment of iceplant. The Navy conducts annual surveys for and treatment of invasive plants and, in the near future, will be expanding treatment of iceplant. A vegetation management plan is under development to support terns and plovers. Focused rare plant management includes <i>Phacelia stellaris</i>, <i>Dudleya variegata</i>, among other rare plants that are less abundant on Silver</p>

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287.	San Diego Audubon Society	<p><b>IMPACTS ON VERNAL POOLS</b>                      Vernal pools are one of the most endangered habitat types in all of California. These pools house a vast array of life forms, including endangered species like the San Diego Fairy Shrimp. Trails running through the vernal pools will disturb the sensitive hydrology of the pools, even if they are only used during the dry season. Cysts can be crushed and damaged even in the dry season. There is no way to predict the damage that could be caused to the vernal pools by crossing through them, even limited to just the dry season. The complex ecology of vernal pools is easily disturbed. We urge that the vernal pools be fenced, and that crossing of vernal pools be prohibited.</p> <p>Paragraph 3.11.1.1.1, Regulatory Framework, states that the Fish and Wildlife service may issue a Biological Opinion that will state measures that will avoid or minimize the take of any listed species. Table 3.11-3 acknowledges that Alternatives 1 and 2 could adversely impact individual fairy shrimp. The foot traffic will have direct and indirect impact on the vernal pools, even if the foot traffic through the pools is limited to dry seasons. The direct impact is that cysts will be damaged or destroyed by the foot traffic. This is addressed in the EIS. When people walk through an area that contains weedy species, the seeds of the weeds often attach themselves to the shoes, clothes, and equipment of the people. These seeds drop off as the people walk elsewhere, helping to disburse the weed seeds. The invasion of these weeds can have many negative impacts on the pools, including shadowing, increasing evaporation and transpiration rates, degrading the hardpan, etc. There is no way to minimize this impact. Foot traffic could also wear depressions in the containment mounds of the pools eventually changing the hydrology of the pools, preventing the pooling from occurring. Foot traffic could also change land contours separating a pool from its immediate watershed. The EIS does not address any of these significant impacts as it needs to. Clearly these impacts will progressively degrade the pools and will reduce the likelihood that fairy shrimp will be able to recover.</p>	<p>To the maximum extent consistent with training needs, off-road foot traffic will avoid the vernal pools occupied by San Diego fairy shrimp and their watersheds. Avoidance may be accomplished using markers, maps, global positioning coordinates, or any other means consistent with training needs. The Navy agrees that cysts will be crushed and damaged in the dry season. However, there are tens of thousands if not millions of cysts, and the take of some during training on foot is not expected to be a population-level effect. The low number of personnel walking in a dispersed manner in the training area is not a large effect, considering the percent of the training area occupied by the pools. The nature and level of expected take have been addressed in a BA, and the Navy has completed consultation with USFWS on this (Biological Opinion signed July 7, 2010).</p> <p>The Navy believes that the potential impact is sufficiently low that it can be managed on site. The nature and level of expected take have been addressed in a Biological Opinion from the USFWS. No violation of the Endangered Species Act will occur because the Navy has requested and received USFWS approval for any impacts to fairy shrimp.</p>

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		<p>Clearly, allowing foot traffic through the vernal pools will not "minimize" (as stated several times in the EIS, including Table 3.11-3) the take of fairy shrimp in any sense and is a violation of the Endangered Species Act. Limiting the access to foot traffic in dry weather may slightly reduce it, but that is very far from minimizing it in either a legal or practical sense. Pinocchio got a very long nose when he said things like that.</p> <p>Unfortunately the EIS does not address the conservation of the pools that are not occupied by fairy shrimp. The objective of the Endangered Species Act is Recovery, not just hanging on, or not facilitating the incremental decline of the species. For recovery to occur, a reasonable amount of unoccupied habitat must be protected to accommodate more populations. We urge that a significant portion of unoccupied and restorable pools be protected as well as occupied pools.</p> <p>The survey for fairy shrimp, on which this document is based, was conducted in 2001 and 2003. A more recent survey is required to know how many pools are currently occupied. We urge that decisions be based on a more timely survey.</p> <p>We strongly urge that the Project require that all occupied, and all unoccupied pools with a reasonable chance of being restored for future occupation, be fully fenced and that regulations be implemented that forbid entry at any time of the year except for needed maintenance or emergencies. We also urge that the watershed of these pools also be protected so the hydrology of these pools and their necessary watersheds will be viable.</p> <p>If the Project intends to use vernal pools for foot traffic in spite of the potentially serious impacts, we urge that a multi-year experiment be conducted to assess the impacts on a single test pool, and that all other pools be fully fenced and protected until the potential impacts are fully understood and disclosed.</p>	<p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>

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288.	San Diego Audubon Society	<p>WHEN THE CURRENT DEMAND FOR BEACH TRAINING RELAXES</p> <p>The EIS addresses the need for additional training capability because of the additional deployments to war zones. It does not address returning to the current protection of nesting birds in the three lanes when the need for training is relaxed. If Alternative 1 is adopted, will it be a temporary measure? If Alternative 1 or 2 are implemented, we urge that the EIS contain a commitment that it will revert to the No Project configuration when the need for additional training is reduced in the future.</p>	<p>The EIS identifies alternatives, including the Navy’s preferred alternative, and the decision-maker selects one of those alternatives in the ROD. The purpose of the Proposed Action is to enable the Navy to perform realistic training in a variety of environments to achieve full operational readiness. With the mitigation measures presented in the EIS (and brought forward from the USFWS Biological Opinion) and maintenance of preferential training areas outside of nesting areas, the activities listed under Alternative 1 should not need to be decreased in the future if the training regime shifts.</p> <p>The Navy is proposing to amend its current management of nesting birds for several reasons. Most of those reasons are unrelated to the additional deployments to war zones (Sections 1.5.1.1, 1.5.1.2, and 1.5.1.3). The Navy is not anticipating that the need for training is going to be relaxed. The Navy anticipates that the need for training will increase after the current conflicts are over (see Section 2.2.1). Also, the needs for better quality training and more flexible usage of the training range are not dictated by wartime situations. The Navy needs to maintain the highest level of force readiness at all times to prepare for combat, and needs high quality training to ensure this readiness.</p> <p>However, the Navy does have several measures that will further reduce impacts to nesting birds if training were to be reduced in the future. As discussed above, and in Section 3.12.1.5.3 of the FEIS, beach scheduling procedures bias activities with heavier beach use towards beach lanes with fewer nests, when it does not impact the realism of training or training needs. This means that heavy impact training would be preferentially scheduled in the Yellow and Green beach lanes where nest numbers are low. If training lanes are available, there is a reduced need to enter into Lanes 8, 9, and 10. Only a few beach activities need to use Lanes 8, 9, or 10, and are activities with small footprints and low impact on nesting birds. Section 3.12.3.1.2 further discusses the mitigative effects of this scheduling efficiency.</p>

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289.	San Diego Audubon Society	<p>CONCLUSION                      This document does not satisfy the letter or the intent of NEPA. We strongly urge that the "No Project" Alternative be adopted. However, it appears that a more thoughtful alternative, with real mitigation measures, could be put together that would allow an increase in the training capacity of the Silver Strand while protecting or even enhancing its extremely valuable natural resources. We encourage the Navy to move in that direction in a future Draft of the EIS.</p> <p>The Navy has had laudable success in its well conceived and well managed mitigation projects for past impacts to terns and plovers on Silver Stand. It is regrettable that this project will seek to significantly dismantle some of that success.</p> <p>If the Navy decides to move ahead with the current alternatives, we strongly urge that the next Draft quantify what impacts of the project will and will not be offset by the mitigation proposed. We urge that the Navy then identify mitigation that will fully offset the deficit.</p> <p>We strongly urge that the Species Viability Model used in this Draft be substantially updated or not used. It is not the least bit certain that the current population of least terns is viable in view of our environmental and climate uncertainties. That model clearly does not provide credible justification to the assertion the species will do just fine with a drop of a couple thousand birds.</p>	<p>As discussed in other responses to your comments, thoughtful alternatives have been presented in this EIS. As described in Section 2 of the FEIS, the Navy considered, but rejected, alternatives that included moving exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action. Additionally, alternatives were eliminated that investigated the distribution of military activities to different locations within SSTC.</p> <p>In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1) and the western snowy plover (Section 3.12.3.2) to provide a more in-depth analysis of impacts that training is expected to have on the species. Additional analysis has been provided on the indirect and direct impacts of current and proposed military training, to include both an average anticipated impact as well as a high-intensity anticipated impact. New mitigation measures have been added to the Proposed Action. The benefits of current and proposed mitigation are also described and quantified, to the extent practicable. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. The Navy has consulted with the USFWS, and received a Biological Opinion (July 7, 2010) for take of the listed species associated with military training. An update of the Species Viability Model is needed; however, it is currently the best available science. The Navy sees its responsibility as contributing to recovery. The Navy works each year on site-maintenance and monitoring, plus periodic site enhancement or management approaches to manage terns, and to increase attractiveness of Delta beaches.</p>

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290.	San Diego Audubon Society	<p>The San Diego Audubon Society is very concerned with the proposed project. We appreciate the current efforts of the Navy to protect and enhance the safe nesting of California Least Terns and Western Snowy Plovers on the Silver Strand. Section 5.11.1. is a very interesting history of Navy environmental responsibility and leadership. We also appreciate the expanded training needs for the Navy because of our Nation’s current high level of military activity. However, we do not think that the plan needs to be more protective than the current Alternative 1 or 2. Therefore we support the No Project alternative unless Alternate 1 can be improved substantially. We strongly urge that Alternative 2 not be selected because of its large and irresponsible impact on least terns and snowy plovers.</p> <p><b>IMPACTS ON LEAST TERNS AND SNOWY PLOVERS</b></p> <p>The population of Least Terns has risen substantially over the last 15 years, as the EIS shows. But, the reproduction of Least Terns has generally been declining over the last decade as the EIS also shows. This suggests that the species is not doing nearly as well as it looks. It is also thought that the average age of the birds is increasing, which could cause less reproductive success. This is clearly not a good time to increase the take of the species, particularly when that take is avoidable. We will be more specific in the following subheadings.</p>	<p>Local declines in reproductivity are disproportionately related to predation by gull-billed terns. The discussion in the EIS has been amended to explain the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The difference in incidental take for the snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year. The Navy will implement a mitigation measure to schedule training in areas where less nesting occurs when possible and still meet training needs. In addition, the Navy will schedule training activities that could be conducted on the hardpack portion of the beach during low tides, when it is consistent with training needs. The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy may entail signage affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff. Finally, the Navy’s Proposed Action includes: ongoing nesting site preparation at the Delta Beaches; predator management; population monitoring; a Long Term Habitat Enhancement Plan; and measures to eliminate unauthorized recreational trespass, which are all conservation measures that support the recovery of the least tern. The Navy expects that implementation of these conservation measures will maintain the suitability of least tern habitat within the action area over the long term. The Navy’s actions will increase the capacity of oceanside beaches and the Delta beaches to accommodate least terns and snowy plovers. Historical takes between 2005 and 2009 averaged 38 nests being directly impacted annually, potentially due to military training on SSTC-N Beach Lanes 1-7 (see Section 3.12.3.1). Modeling for the highly intense training scenario of the No Action Alternative conservatively estimated that 88 California least tern nests would be directly impacted annually (see Section 3.12.3.1 for modeling methodology). All birds present would be potentially subject to disturbance.</p>

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			<p>Nesting activity has increased despite the average historical annual loss of 38 nests (Figure 3.12-9), indicating a capability of the species to not only continue to persist on SSTC, but also to increase, with training occurring in the nesting beaches during the nesting season. Much of this has to do with the Navy's mitigation measures and management practices discussed below.</p>
291.	San Diego Audubon Society	<p><b>CUMULATIVE IMPACTS NOT ADDRESSED, LEAST TERNS</b>                      The EIS provided a long list of likely activities for which the cumulative impacts have been addressed. We are concerned that several very relevant activities were not addressed that, when combined with Alternative 1 or 2 could help put the recovery, and perhaps even the survival of the species in jeopardy.                      The U.S. Fish and Wildlife Service has proposed downlisting the least terns from Endangered to Threatened. This would reduce the priority for funds, for priority for other resources such as locations for new nesting areas, negotiating site management agreements, predator management, protection and enhancement of the fish needed for foraging, research, monitoring, planning, analysis, site maintenance, etc. This reduction in resources and priorities will take a toll on the species, in both predictable and unpredictable ways.                      Global Climate Change appears to be making the quantity and timing of the supply of small fish for least tern consumption more variable and more uncertain. This affects the laying of eggs and the likelihood that chicks will survive. Changes are happening very quickly which could leave the entire population more vulnerable.                      The impacts of Gull-billed terns on tern reproductive have been significant and appear to be increasing. There appears to be no real progress toward identifying how to manage the two species to assure the recovery of least terns. This lack of resolution is likely to result in a large and unmanaged take of least terns for at least several years while regulations are developed, reviewed, and finally implemented.                      The Recovery Plan for least terns is almost three decades old and is based on outdated information. As a result, there is no effective comprehensive and broadly accepted plan for the recovery of least terns. This deficiency in planning and management means that there is no valid way to conclude that the additional take proposed by Alternatives 1 or 2 will not help put the species in jeopardy. We urge that the EIS discuss each of the additional cumulative impacts mentioned above and incorporate their effects into a realistic Species Viability Analysis.</p>	<p>Downlisting the least tern does not affect Navy funding priorities in its INRMPs - Endangered and Threatened species are classified with the same funding priority. Navy is contributing to research on climate change and least tern foraging habits in San Diego Bay. Gull-billed tern predation studies are also underway by the Navy and other funders (including USFWS).</p> <p>The Navy agrees that the USFWS Recovery Plan is outdated, and concerns about an inadequate PVA population viability assessment are acknowledged. A species viability analysis is under consideration for funding.</p> <p>Gull-billed tern predation studies are also underway by the Navy and other funders (including USFWS), and the Navy has requested approval from USFWS to relocate Gull-billed terns, without success. A species viability analysis is under consideration for funding. The USFWS has not officially proposed the California least tern for downlisting. If and when it does, the proposal will be published in the Fed Register and will be open for public comment before a final decision is made.</p> <p>The Navy is working closely with the USFWS to assist it in addressing gull-billed tern predation and impacts to western snowy plover and California least tern. The Navy has submitted an application for a depredation permit to the USFWS Division of Migratory Bird Management annually since 2005, and has continued to document the impacts of this</p>

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			<p>species. The Navy is supporting a radio-telemetry study by San Diego State University and USFWS during the 2010 nesting season. This study will research movements and diet of gull-billed terns around San Diego Bay.</p>

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292.	San Diego Audubon Society	<p><b>SPECIES VIABILITY ANALYSIS, LEAST TERNS</b></p> <p>The Species Viability Analysis is based on reproduction rates measured in 1981 to 1984, page 3.12-21. At this time the productivity was 0.62 fledgling per nest in good years and 0.27 for years dominated by El Nino/Southern Oscillation (ENSO). The ENSO influence was expected about one out of seven years.</p> <p>According to a figure in the handout from the public presentation, in the last 8, the good years have had productivity around 0.15 for the good years and 0.05 for the bad ones. It appears that we have had 8 bad years in a row vs. the one bad year anticipated in the Species Viability Analysis. As mentioned above the analysis assumes one ENSO year for every 7 normal years. However, some climate models now suggest that with global warming the average may become more like the ENSO state.</p> <p>The model also does not address other trends that could increase the risk to the food supply for least tern recovery such ocean warming, reduced oxygen levels in the ocean, and ocean acidification. Each of these issues suggests that the Species Viability Model is probably wildly optimistic. We urge that this EIS not conclude that a lower population of least terns will not jeopardize the recovery of the species unless it can be based on current and relevant data and the best analysis of future trends. Such an analysis should also incorporate the effects of the cumulative impacts listed previously in this letter. Any model used should include the uncertainty range of the input information, the uncertainties of the assumptions the model is based on, how the uncertainties propagate through the model, and the uncertainty of the results. A model that produces a number without clear quantification of the uncertainty of that number will probably be more misleading than useful.</p> <p>The species viability analysis only appears to address keeping the species from declining to extinction. The purpose of the Endangered Species Act is recovery. This analysis needs to be redirected to identify a population and population growth rate that will lead to reliable recovery of each species in a reasonable period of time.</p>	<p>The USFWS is responsible for such a viability assessment, while the Navy is responsible for management and contributions to least tern recovery. The take estimates are a worst-case scenario; the birds actually tend to redistribute to safer areas. The Navy will be increasing the carrying capacity for terns and plovers through its Long Term Site Enhancement Plan.</p> <p>The Navy is proposing to develop and implement a long-term site enhancement plan for SSTC-N, including both the oceanside and the bayside beaches. The long-term site enhancement plan is estimated to more realistically mitigate for an estimated 360 nests annually. This site enhancement plan will work to control and, where possible, remove invasive non-native vegetation on the beaches and, if appropriate, replace it with native vegetation. SSTC-N oceanside training lanes contain over 16 acres of overgrown invasive vegetation (Table 3.12-13), mostly towards the back one-third of the beach. While this additional depth of beach is needed for several reasons, including providing separation from the highway, most training has a minimal footprint on this area. Training is most heavily concentrated in areas closest to the tide line. Removal or replacement of invasive overgrown vegetation in the back beach area will open these safer areas up to nesting activity.</p>

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293.	San Diego Audubon Society	<p>IMPACT OF NOISE AND DISTURBANCE ON LEAST TERNS AND SNOWY PLOVERS</p> <p>We were pleased to see the substantial analysis of the average and peak noise resulting from the project in Section 3.6, ACOUSTIC ENVIRONMENT. But we were extremely disappointed to discover that the noise analysis was only related to "sensitive receptors" of the human kind. The EIS provides no analysis to determine if the increases in average noise or peak noise from the increases in gunfire, flares, and detonation would result in a take of least terns or snowy plovers. This take could result from either least terns or snowy plovers abandoning eggs or chicks because of the additional noise, either on the ocean side or the bay side of the Silver Strand. We strongly urge that the EIS include analysis of the indirect take of chicks and eggs that will result from permanent nest abandonment that is likely to result from the increase in noise, both average and peak. We also urge that the EIS include analysis of the indirect take of chicks and eggs that is likely to result 3 from temporary abandonment that would make the eggs and chicks more vulnerable to death from heat, cold, predators, and starvation.</p>	<p>The EIS does analyze noise and its effect on wildlife (see FEIS Sections 3.11.2 Terrestrial Biological Resources Environmental Consequences; 3.12.2.2.1 Air Activities; 3.12.2.2.2 Pyrotechnics, Simulations, and Blanks; and 3.12.2.2.4 Amphibious and Beach Activities, and parallel sections under the other Alternatives). Existing noise levels do not appear to cause nest abandonment, and projected received noise levels are not very different considering the noise source location and the location of nesting avian species.</p>
294.	San Diego Audubon Society	<p>ALTERNATIVES</p> <p>The limited range of alternatives that are presented do not provide a good starting point for a productive process to resolve the project's operational and environmental problems. We urge that the EIS alternatives be expanded to lead to a reasonable solution to the Navy's training problem. Many of the missions that are proposed can be accomplished with virtually no beach access. We urge that the uses of lanes blue 2, orange 1, and orange 2 be limited to those missions. Needed access for them could be by boat vs. land. If emergency access is occasionally needed over the beach in case of an accident, that could be considered valid unavoidable "incidental take". Such an alternative should be developed and analyzed.</p> <p>We also urge that an alternative be analyzed that allows the lanes at Camp Pendleton to be used to relieve some of the scheduling pressure on the Silver Strand Beach Lanes without taking out least tern and snowy plover eggs and chicks.</p>	<p>As stated in Section 2.3.5 of the FEIS, the three training lanes are only used if one of two criteria are met. The Navy preferentially schedules activities for other beach training lanes unless all training lanes are being used, or there are attributes of those lanes that make training there more suitable.</p> <p>The Navy preferentially schedules water-only training activities in Lanes 8, 9, and 10 because of the distance those lanes are located from NAB. As stated in Section 2.3.5 of the FEIS and the criterion that has been established for the lanes, the Navy does not anticipate heavy use of Lanes 8, 9, and 10.</p> <p>As described in Section 2.1.3 of the EIS, the Navy considered, but rejected, alternatives that included moving these exercises to other locations. Such alternatives fail to meet the purpose of</p>

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			and need for the Proposed Action.
295.	San Diego Audubon Society	<p>MITIGATION FOR LEAST TERNS AND SNOWY PLOVERS</p> <p>The mitigation measures for the impacts of this project are defined in section 12.4.1: "Develop a site enhancement plan that includes establishing dunes on the windward edges of Delta North and South that would enhance this area for plovers, create a source of sand for the least tern nesting area, and establish a better visual barrier between SR-75 and the nesting colony." It is not clear what is meant by "Develop a site enhancement plan..." Does that mean that the enhancement would actually be built? How big? When would it be built? Would it be in place and functioning before Alternative 1 or 2 would be implemented? Would it be maintained in perpetuity, or just constructed? This sort of information should have been a major element of the EIS.</p> <p>We would appreciate habitat enhancements. But, is it anticipated that these measures would result in an improvement in productivity in terns and plovers that would offset the anticipated direct and indirect take that would result from Alternative 1 or 2? It appears very doubtful that it would. But one of the purposes of the EIS is to identify the net impact of the project with the mitigation. It does not. A better visual barrier between SR-75 and the nesting colony will also mean a better approach path for avian predators to approach the tern colony without being detected. We strongly doubt that will improve the productivity of the colony.</p> <p>Section 12.4.2 states: "Vehicle patrolling and LARC V operator training will not occur in Red, Blue, or Orange Beach Lanes." How many least terns of snowy plovers will this save? Will the terns and plovers that are saved by this measure survive the other activities that will occur in these lanes under Alternatives 1 and 2? It does not appear that it would. Again, the EIS fails to discuss or answer this question, which is one of its main purposes.</p> <p>The two mitigation measures in the EIS may tend to reduce or offset the take to some extent, but they do not appear to minimize or to offset the impacts of the Project. If Alternatives 1 or 2 are adopted in spite of their inappropriate impacts, we urge that mitigation be provided that will actually offset the take that results from those actions.</p> <p>The EIS does not indicated that any accounting will be done to identify how much of the environmental impact of the project is expected to be offset by the mitigation. How would a regulator or decision maker be able to identify how much environmental impact has occurred and how much has been offset by the mitigation over time? We urge that the EIS provide how such an ongoing net impact assessment will be accomplished to facilitate the adaptive management process that is mentioned. If the project results in a substantial increase in a net take, or if the viability of the terns and plovers begins to diminish, will the project include additional specific mitigation measures to restore protection of the nesting at the three lanes or more to offset the loss? Though adaptive management is suggested, there are no specifics of it. It appears that there are areas in the SSTC South area that could be used to mitigate for the impacts of this project that would be difficult and costly to use for training. We urge that the Final version of this document explore that possibility.</p>	<p>The addition of sand is contemplated as a principal element of the site enhancement plan to make the historically designated nesting areas more attractive for nesting terns and more secluded from the road. Accounting will take place through monitoring of take and reproductive success. In addition, the Long Term Site Enhancement Plan, which is part of the Proposed Action, could increase the carrying capacity for terns by hundreds of nests. For snowy plovers, the long-term site enhancement plan is estimated to realistically mitigate for an estimated 34 nests annually.</p> <p>The FEIS quantitatively estimates the amount of benefit provided by Navy management above and beyond that required by past projects, and that can be considered avoidance, minimization, and offsetting measures related to training. Besides setting aside real estate, the most important mitigation measure is probably predator control. The Navy has a number of predator management and control measures that it implements throughout the breeding season to minimize impacts from predators, including avian predators, ants, and mammals (see Section 3.12.1.5.3 for more detail). In 2009, 512 individual predators were managed (either lethally removed or freed away from the nesting sites). During that same year, there were 32 documented predation incidents on California least terns and western snowy plovers other than by gull-billed terns. Predator control has beneficial impacts beyond protecting individual eggs or chicks from loss to predation. The presence of predators can cause disturbance, flushing, or even nest abandonment, potentially leading to overall habitat degradation or loss. As discussed in Section 3.12.1.3.1 of the FEIS, because California least terns are colony breeders, they are particularly susceptible to predation and disturbance. Predator control is considered by many species experts to be one of the most crucial management strategies for reproductive success (Foster 2006; USFWS</p>

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			<p>2006c). On Camp Pendleton, a rough tripling of nesting California least tern adult pairs from 1995 to 2001 was considered to be associated with the active removal of predators (Shwiff et al. 2004). Without the Navy's predator control program, the SSTC nesting sites would likely have substantial reproductive failure. This predator control program has allowed for and is expected to continue to promote over one thousand nests that are annually found on SSTC-N.</p> <p>All of SSTC-S is either used to support training or set aside for conservation of the species, or used by Camp Surf. There is no location for additional mitigation.</p>
296.	San Diego Audubon Society	<p>IMPACTS ON DIVING BIRDS We appreciate the analysis that was performed relating to the impacts of underwater detonations on diving birds and marine mammals. However, we have not had the resources to verify the data, rationale, or conclusions at this time. We also appreciate the plan to discourage diving birds from the exercise area to prevent injuries or death to them.\</p>	<p>As indicated in Section 3.12 of the FEIS and in the signed Biological Opinion (July 7, 2010), the Navy has a mitigation measure to look for diving birds and marine mammals prior to detonation and to halt the detonations until the animals have voluntarily left the area.</p>
297.	San Diego Audubon Society	<p>PROTECTION OF SENSITIVE PLANT SPECIES We do not think that the protection of sensitive dune and upland species proposed by the EIS is adequate, but have not had the resources to comment specifically on it at this time.</p>	<p>The Navy has an invasive species control program that directly benefits sensitive plant species. Upland rare plants are locally relatively abundant, and benefit from annual invasive species control and monitoring. Some benefit occurs through restoration that primarily involves weed control. Avoidance and minimization measures are implemented at the Delta beaches for plants identified as rare by the California Native Plant Society as List 1B or higher. The Navy conducts annual surveys for and treatment of invasive plants and, in recent years, has been expanding treatment of iceplant. A vegetation management plan under development to support terns and plovers also benefits sensitive plant species. Focused rare plant management includes <i>Phacelia stellaris</i>, <i>Dudleya variegata</i>, among other rare plants that are less abundant on Silver Strand.</p>

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298.	San Diego Audubon Society	<p><b>IMPACTS ON VERNAL POOLS</b></p> <p>Vernal pools are one of the most endangered habitat types in all of California. These pools house a vast array of life forms, including endangered species like the San Diego Fairy Shrimp. Trails running through the vernal pools will disturb the sensitive hydrology of the pools, even if they are only used during the dry season. Cysts can be crushed and damaged even in the dry season. There is no way to predict the damage that could be caused to the vernal pools by crossing through them, even limited to just the dry season. The complex ecology of vernal pools is easily disturbed. We urge that the vernal pools be fenced, and that crossing of vernal pools be prohibited.</p> <p>Paragraph 3.11.1.1.1, Regulatory Framework, states that the Fish and Wildlife service may issue a Biological Opinion that will state measures that will avoid or minimize the take of any listed species. Table 3.11-3 acknowledges that Alternatives 1 and 2 could adversely impact individual fairy shrimp. The foot traffic will have direct and indirect impact on the vernal pools, even if the foot traffic through the pools is limited to dry seasons. The direct impact is that cysts will be damaged or destroyed by the foot traffic. This is addressed in the EIS. When people walk through an area that contains weedy species, the seeds of the weeds often attach themselves to the shoes, clothes, and equipment of the people. These seeds drop off as the people walk elsewhere, helping to disburse the weed seeds. The invasion of these weeds can have many negative impacts on the pools, including shadowing, increasing evaporation and transpiration rates, degrading the hardpan, etc. There is no way to minimize this impact. Foot traffic could also wear depressions in the containment mounds of the pools eventually changing the hydrology of the pools, preventing the pooling to occur. Foot traffic could also change land contours separating a pool from its immediate watershed. The EIS does not address any of these important but significant impacts as it needs to. Clearly these impacts will progressively degrade the pools and put the current fairy shrimp or the possibility of recovery of the species in jeopardy.</p> <p>Clearly, allowing foot traffic through the vernal pools will not "minimize" (as stated several times in the EIS, including Table 3.11-3) the take of fairy shrimp in any sense and is a violation of the Endangered Species Act. Limiting the access to foot traffic in dry weather may slightly reduce it, but that is very far from minimizing it in either a legal or practical sense. Pinocchio got a very long nose when he said things like that.</p> <p>Unfortunately the EIS does not address the conservation of the pools that are not occupied by fairy shrimp. The objective of the Endangered Species Act is Recovery, not just hanging on, or not facilitating incremental decline of the species. For recovery to occur, a reasonable amount of unoccupied habitat must be protected to accommodate more populations. We urge that a significant portion of unoccupied and restorable pools be protected as well as occupied pools. The survey for fairy shrimp, on which this document is based, was conducted in 2001 and 2003. A more recent survey is required to know how many pools are currently occupied. We urge that decisions be based on a more timely survey.</p> <p>We strongly urge that the Project require that all occupied, and all unoccupied pools with a reasonable chance of being occupied, be fully fenced and the regulations be implemented that forbid entry at any time of the year except for needed maintenance or emergencies. We also urge</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The size of these pools varies, but they are large relative to the foot traffic, covering 3.2 acres. While harm to cysts is expected and analyzed, the order of magnitude is expected to be a few cysts, compared to an estimated population of tens of thousands if not millions of cysts in these pools.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to <i>the extirpation of fairy shrimp from</i></p>

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		<p>that the watershed of these pools also be protected so the hydrology of these pools and their necessary watersheds will be viable.                      If the Project intends to use vernal pools for foot traffic in spite of the potentially serious impacts, we urge that a multi-year experiment be conducted to assess the impacts on a single test pool, and that all other pools be fully fenced and protected until the potential impacts are fully understood and disclosed.</p>	<p><i>any individual pool, then the Navy will reinitiate consultation with the USFWS.</i></p> <p>The Proposed Action will not all occur immediately, but slowly scale up over time, and only after the baseline condition of the vernal pools has been established, and Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This deliberate process will allow the Navy to evaluate the potential impacts and to take corrective action, as necessary.</p>
299.	San Diego Audubon Society	<p>WHEN THE CURRENT DEMAND FOR BEACH TRAINING RELAXES                      The EIS addresses the need for additional training capability because of the additional deployments to war zones. It does not address returning to the current protection of nesting birds in the three lanes when the need for training is relaxed. If Alternative 1 is adopted, will it be a temporary measure? If Alternative 1 or 2 are implemented, we urge that the EIS contain a commitment that returning to the No Project configuration when the need for additional training is reduced in the future.                      CONCLUSION                      As it stands we strongly urge that the "No Project" Alternative be adopted. However, it appears that a more thoughtful alternative, with real mitigation measures, could be put together that would allow an increase in the training capacity of the Silver Strand while protecting or even enhancing its extremely valuable natural resources. We encourage the Navy to move in that direction in a future Draft of the EIS. If the Navy decides to move ahead with the current alternatives, we strongly urge that the next Draft quantify what impacts of the project will and what will not be offset by the mitigation proposed. And we strongly urge that the Species Viability Model used in this Draft be substantially updated or not used. It is not certain that the current population of least terns is viable in view of our environmental and climate uncertainties. That model clearly does not provide a credible justification to think the species will do just fine with a drop of a couple thousand birds.</p>	<p>The EIS identifies alternatives, including the Navy's preferred alternative, and the decision-maker selects one of those alternatives in the ROD. With the mitigation measures presented in the EIS (and brought forward from the Biological Opinion and USFWS consultation), and maintenance of preferential training areas outside of nesting areas, the activities listed under Alternative 1 should not need to be decreased in the future if the training regime shifts.</p> <p>The Navy is proposing to amend its current management of nesting birds for several reasons. Most of those reasons are unrelated to the additional deployments to war zones (Sections 1.5.1.1, 1.5.1.2, and 1.5.1.3). The Navy is not anticipating that the need for training is going to be relaxed. The Navy anticipates that the need for training will increase after the current conflicts are over (see Section 2.2.1). Also, the need for better quality training and more flexible usage of the training range is not dictated by wartime situations. The Navy needs to maintain the highest level of force readiness at all times to prepare for combat, and needs high quality training to ensure this readiness. The Long Term Site Enhancement Plan, which is part of the Proposed Action, could increase the carrying capacity for terns by hundreds of nests. For snowy plovers, the long-term site enhancement plan is estimated to realistically mitigate for an estimated 34 nests annually.</p>

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			<p>The USFWS is responsible for species viability assessment, while the Navy is responsible for management and contributions to least tern recovery. The FEIS quantitatively estimates the amount of benefit provided by Navy management above and beyond that required by past projects, and that can be considered avoidance, minimization, and offsetting measures related to training. Besides setting aside real estate, the most important mitigation measure is probably predator control. The Navy has a number of predator management and control measures that it implements throughout the breeding season to minimize impacts from predators, including avian predators, ants, and mammals (see Section 3.12.1.5.3 of the Feiffer more detail). Predator control is considered by many species experts to be one of the most crucial management strategies for reproductive success (Foster 2006; USFWS 2006c). Without the Navy’s predator control program, the SSTC nesting sites would likely have substantial reproductive failure. This predator control program has allowed for and is expected to continue to promote over one thousand nests that are annually found on SSTC-N.</p> <p>As discussed in Section 2.1.3.3 of the FEIS, reductions in training from current levels at SSTC would not support the Navy’s ability to meet training requirements consistent with the Fleet Readiness Training Plan (FRTTP) and, as discussed in Section 1.5 of the EIS, the purpose of and need for the Proposed Action.</p>

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300.	San Diego Bay Council	<p>Despite the voluminous Draft Environmental Impact Statement, the Navy has not taken a hard look at the direct, indirect, and cumulative impacts this increased training will have on the community and the environment. The heart of the National Environmental Policy Act is for the Navy to fully analyze and weigh the consequences of each of its possible project alternatives, before selecting one. As part of this process, the Navy must inform members of the public of the burdens the Navy is expecting it and the environment it uses and enjoys" to bear as a result of the project, before the project is approved and an alternative selected. Here, the Navy's conclusory "analysis" and lack of meaningful alternatives makes NEPA nothing more than a meaningless exercise and deprives the public of the important information it is entitled to under the law.</p> <p>While the San Diego Bay Council has a multitude of serious concerns about the Navy's proposed training increased activities and frequencies, this letter focuses on only three of our main concerns. We appreciate the extension the Navy granted so that we could submit these comments, but even with the extension, we were unable to delve into all our concerns in detail. We reserve the right to rely on other comments submitted during the public comment process, and we fully adopt here all comments submitted by the San Diego Audubon Society</p>	<p>As described in Section 2 of the FEIS, the Navy considered, but rejected, alternatives that included moving exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action. Additionally, alternatives were eliminated that investigated the distribution of military activities to different locations within SSTC. Only those analyses that remained were selected for analysis.</p>
301.	San Diego Bay Council	<p>I. The Draft EIS Fails to Analyze Anticipated Water Quality Impacts From Increased Smoke Grenades, Flares, and Surface and Underwater Detonations.</p> <p>The Navy's proposed ramp-up in training at the Silver Strand Training Complex involves a significant increase in the amount of hazardous ordinance the Navy will be using. For example, the Navy plans to increase the use of smoke grenades and flares from 2,990 pounds to 4,410 pounds. See SSTC DEIS at 3.4-13. The smoke grenades and flares may contain aluminum, magnesium, zinc, strontium, barium, cadmium, nickel, and perchlorates. See SSTC DEIS at 3.4-11. The Draft EIS states that these hazardous pollutants will not cause any problems because "most of them are present in small amounts or low concentrations." See SSTC DEIS at 3.4-11. The Draft EIS summarily concluded that the "low concentrations of leachable metals" in the No Action Alternatives do not rise to the level of hazardous materials. See SSTC DEIS at 3.4-11.</p> <p>The Draft EIS then deferred to the "Hazardous Waste" analysis in its water quality impacts analysis. See SSTC DEIS at 3.5-21. Specifically, the Draft EIS states that the "Hazardous Waste" analysis "concluded that only trace amounts of these residues are deposited on the ranges, and they are not expected to affect surrounding biological or physical resources." See SSTC DEIS at 3.5-21. But nowhere does the Navy actually analyze the impact of nearly doubling the amount of pollutants it plans to deposit during training. Instead, the Draft EIS characterizes the pollutants as "trace" amounts and summarily dismisses their potential</p>	<p>While the SSTC FEIS discusses a cumulative increase in the quantity of smoke grenades and flares used in training events, the increase is quantified in terms of individual grenades and flares, and not necessarily the small quantities of potentially hazardous substances. There will be little use of smoke grenades and flares directly in or over water. Use per training event in which smoke and flares apply is also small (2-11 items). In addition, this use is spread throughout the year and at various locations within SSTC, so there hot spots on the ranges.</p> <p>Smoke grenade filler has approximately 11 ounces of a colored smoke mixture (white, red, yellow, green and violet). The smoke mixture is composed of a mixture of potassium chlorate, sodium bicarbonate, lactose and a dye, all of which have—in the amounts or quantities specified in the EIS—no significant environment effect. In addition, most of the filler is</p>

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		<p>environmental impact. Even at low concentrations, pollutants can cause serious problems. Because the Navy plans to almost double the amount of pollutants from smoke grenades and flares, it needs to take a hard look at the potential environmental impacts of such a drastic increase in pollution.</p> <p>Likewise, the Navy plans to double its surface and underwater detonations. See SSTC DEIS at 3.5-22, tbl 3.5-7; 3.5-25, tbl 3.5-8. Yet the Draft EIS assumes there will be no measurable impact on water quality, even though "combustion is less than 100 percent and residues of these hazardous materials may remain in the water and sediment." See SSTC DEIS at 3.5-25. The Draft EIS provides no support or justification for this conclusion.</p> <p>The Draft EIS also fails to examine the cumulative, long-term impacts of increasing the amount of pollutants released into the ocean and bay. Under NEPA, the Navy must examine the direct, indirect, and cumulative impacts of its proposed action. Here, the Navy has failed to examine the cumulative impacts of doubling the amount of hazardous pollutants it puts into our waters each year. To satisfy its NEPA requirements, the Navy must fully examine the cumulative impacts of increased water pollution.</p>	<p>consumed during use. Chemical composition of military flares can be a combination of magnesium, boron, potassium perchlorate, and barium chromate (USAF 1994) or, in some cases red phosphorus. Red phosphorus is a common ignition compound used for instance in matches. Red phosphorus is a relatively non-toxicity compound, although highly flammable, and subject to environmental degradation in marine systems (Spangford et al. 1985, EFRB 2010). In an analysis of military flares, the US Air Force found that most of the common flare constituents were consumed during flare ignition. Residual ash from flares contained small quantities of magnesium and boron (USAF 1994). Measured values of magnesium in flare ash [86 part per million (ppm)] were found to be below the natural seawater composition of magnesium (1,290 ppm).</p> <p>Potassium perchlorate was not a substantial residue, and was not detected in the ash samples measured. In the rare instance that any perchlorate were to remain, perchlorates are highly soluble, and the ions have a limited tendency to interact with other dissolved chemical species or to adsorb to aquifer materials under typical environmental conditions (Clausen et al 2007). Perchlorate in marine aquatic systems would be subject to environmentally significant bacterial degradation (Urbansky 1998, Logan et al. 2001, Brown and Gu 2006, Petrisor 2006, Wilkin et al. 2007).</p> <p>Therefore, given the limited, short-term potential for smoke grenade and flare residuals to fall into San Diego Bay and the ocean, the relatively low levels of actual constituent released, and the natural environmental degradation of these compounds, the relative risk from use of these items is not substantial.</p> <p>A comparison to related pyrotechnics with substantially more constituents can be made within the San Diego region. For example, the San Diego Regional Water Quality Control Board required water and sediment monitoring by Sea World</p>

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			<p>due to daily firework displays over Mission Bay. On average, Sea World conducts 100-120 shows per year, with each show using up to 250 shells, and up to 1,750 shells for special holidays (SDRWQCB 2007). In support of the concern for potential environmental contamination from fireworks residue, water and sediment samples were taken from 2001 through 2006 as part of a Coastal Commission permit requirement. Samples were analyzed for various constituents found in fireworks, including oxidizers (ammonium perchlorate and potassium perchlorate), metals (antimony, barium, copper, strontium) and salts (magnesium, sodium, etc.). The final monitoring report concluded that there were no substantial spatial or temporal patterns in concentrations of critical metals in sea water or sediments in the small area of Mission Bay subject to repeated large scale fireworks displays (SDRWQCB 2007)</p> <p>Under the No Action Alternative, SSTC training activities require the detonation of small amounts of explosives on the water surface and underwater. While up to 1,610 pounds of explosives are used each year for underwater detonations (Table 3.5-7), the majority of these training events occur on the open ocean side of SSTC.</p> <p>As discussed in Section 3.4.2.1.1 through 3.4.2.1.3 of the FEIS, high-order combustion of typical military explosives used at SSTC such as Royal Demolition Explosive (RDX) and pentaerythritol tetranitrate (PETN) consumes over 99.997 percent of the original explosive material during detonation, with by-products of common inert gases and relatively inert inorganic salts. For example, exploding 10 pounds of Composition (C)-4, which is 91 percent RDX, produces about 3.7 pounds of nitrogen, 25 pounds of CO<sub>2</sub>, 1.6 pounds of water, 1.8 pounds of carbon monoxide, 0.2 pound of ethane, 0.03 pound of hydrogen, 0.02 pound of propane, 0.09 pound of ammonia, and 0.02 pound of methane. The major products of combustion-nitrogen, CO<sub>2</sub>, and water-are all common natural</p>

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			<p>components of the atmosphere and water. Any explosive residue (&lt;0.003 percent) would be relatively insignificant and would be either quickly dispersed by local ocean currents (Section 3.5.1.3.4) , or buried in ocean sediment. Field studies conducted by the US Army indicate that explosives residue includes 0.003 percent or less of the original quantity of material detonated, although the amounts of explosives residues vary among different types of ordnance. Land-based studies show that, for large ordnance items such as bombs, high-order detonations may spread residual particles in the micron and submicron-sized range over hundreds of square meters. However, individual quantities of explosives used at SSTC are substantially smaller than those tested by the Army, which means smaller amount of original detonation material and less explosive velocity. In addition, SSTC explosive events occur in water rather than on land, and would be subject to substantially less dispersion due to the non-compressibility of water. Given the nature of training events at SSTC, low order detonations, while possible, are not the desired training outcome, and any remnants are retrieved to the greatest extent practical to diagnose what may have caused the low-order detonation.</p> <p>The environmental fate and effect of military munitions constituents including RDX have been subject to a number of scientific studies to determine if these compounds represent a risk in the marine environment including water and sediment (Hawari 2000, Belden et al. 2005, Lotufo and Lydy 2005, Houston and Lotufo 2005, Rosen and Lotufo 2005, Juhasz and Naidu 2007, Rosen and Lotufo 2007a, 2007b, Boyd et al. 2008, Monteil-Rivera et al. 2008, Mukhi et al. 2008, Weber 2008, Lotufo et al. 2009, Lotufo et al. 2010, Rosen and Lotufo 2010, Zhao et al. 2010).</p> <p>As a compound in the environment, RDX is subject to natural processes in marine systems that break down (i.e., degrade) the parent molecule to inert nitrogen compounds. Processes</p>

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			<p>include hydrolysis in marine water, photodegradation from light, uptake and metabolism from marine plants, and bacterial degradation in water and sediment (Hawari 2000, Juhasz and Naidu 2007, Boyd et al. 2008, Monteil-Rivera et al. 2008, Lotufo et al. 2009, Weber 2008, Zhao et al. 2010). Based on both laboratory toxicity testing and more realistic environmental exposure scenarios, RDX has also shown low to no toxicity and no potential for bioaccumulation to a variety of marine species including amphipods, mussels, and fish (Belden et al. 2005, Lotufo and Lydy 2005, Houston and Lotufo 2005, Rosen and Lotufo 2005, Rosen and Lotufo 2007a, 2007b, Mukhi et al. 2008, Lotufo et al. 2009, Lotufo et al. 2010, Rosen and Lotufo 2010).</p> <p>Therefore, based on the limited amount of explosive residue actual deposited during SSTC training events, dispersion and natural degradation of any small amount of residue, and limited toxicity to marine organisms, the overall effect on the environment from in-water explosives use would be insignificant.</p>
302.	San Diego Bay Council	<p>II. The Navy’s Proposed Plan Will Interfere With Public Access to the Ocean and Bay.</p> <p>The Draft EIS states that in total, "training would require closure of portions of the ocean or bay for about 7,500 hours per year " or 312 days per year. See SSTC DEIS at 3.5-25. This would mean that portions of the ocean or bay would be closed "for about 85 percent of the year if no training were conducted currently. " See SSTC DEIS at 3.5-25. The Draft EIS suggests that training will "likely overlap in time in an unpredictable way, which would result in multiple areas being closed for a shorter percentage of the year." See SSTC DEIS at 3.5-25.</p> <p>What the Draft EIS does not address is how many of those hours of closure and training activity would occur during the daylight hours when the public is most likely to use the ocean or bay. If San Diego receives, on average, between seven and ten hours of sunlight per day, that can add up to only around 3,000 hours of sunlight per year (Based on San Diego’s average conditions, it is estimated that San Diego receives approximately 3,012 hours per year of sunlight. See <a href="http://www.bbc.co.uk/weather/world/city_guides/results.shtml?tt=TT001510">http://www.bbc.co.uk/weather/world/city_guides/results.shtml?tt=TT001510</a>). If the Navy plans to close the ocean and bay 7,500 hours per year, it is possible to have the bay and ocean closed during all hours of sunlight in a given year.</p> <p>Disturbingly, the Draft EIS includes -but completely disregards- the City of Imperial Beach’s</p>	<p>It is very difficult to indicate, due to scheduling flexibility and changes, the exact overlap in training activities. The EIS indicates that training activities would close portions of the ocean or the bay. Table 2-2 in Chapter 2 indicates not only the number of each activity, but also the possible area in which it could take place. The listing of areas does not indicate that each activity occurs in this entire area.</p> <p>It is possible, and quite reasonable to assume, that there may be an activity that occurs in Boat Lane 1 at the same time as a training activity is occurring at Beach Lane 6 as well as an activity occurring in Echo. Further, these are all discrete areas which the public can circumvent.</p>

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		<p>annual estimates of use for shore and nearshore recreation. See SSTC DEIS at 3.5-18. Those estimates show that along Imperial Beach’s 3.5 miles of beach front, there were 1.8 million beachgoers, 8,000 beach anglers, and 400 fishing boats providing an estimated 10,000 fishing trips. See SSTC DEIS at 3.5-18. The Draft EIS ignores the data, claiming it is not "quantitative information on the actual use of ocean waters off Imperial Beach, and may not be representative of other beach areas, such as Silver Strand State Beach or Coronado Municipal Beach. " See SSTC DEIS at 3.5-18.</p> <p>By ignoring the best information available on ocean use and recreation, the Draft EIS downplays the impact the proposed project will have on public access to the ocean and bay. The Draft EIS actually suggests that the impact will be negligible because "the size of the water area that would be closed for each training activity is relatively small when compared to the total bay and ocean waters available for the uses described in the Basin Plan." SSTC DEIS at 3.5-26. But the Draft EIS fails to look at the cumulative impact of all the training activities on the waters’ designated uses, including recreation. This lack of analysis fails to meet the necessary hard look the National Environmental Policy Act requires.</p>	
303.	San Diego Bay Council	<p>III. The Navy Fails to Take a Hard Look at the Impacts of Increased Training on Endangered Species.</p> <p>The Navy’s plan to expand training activities and increase training frequency will have negative impacts on several endangered species, including the western snowy plover, the California least tern, and the San Diego fairy shrimp. The San Diego Audubon Society has already articulated several concerns we have about the proposed project’s impact on endangered species. Among these concerns are cumulative impacts, lack of meaningful alternatives, noise impacts, mitigation, and lack of analysis of the indirect impacts on chicks and eggs abandoned because of increased training activities. We are also seriously concerned about the decline in the number of least tern fledglings over the past several years. The Navy’s analysis fails to address how the increased training will not further exacerbate this serious decline in fledglings. Also, the Navy fails to articulate a well-reasoned, scientifically-based justification for protecting only 22 western snowy plover nests and how that alternative will protect the species. The Navy must take a hard look at the direct, indirect, and cumulative impacts on the western snowy plover and California least tern in order to satisfy its NEPA requirements. Also, the Navy must satisfy its requirements under the Endangered Species Act to protect these endangered birds.</p> <p>In addition to the snowy plover and the California least tern, the San Diego fairy shrimp also calls Silver Strand Training Complex home. See Silver Strand Training Complex Draft EIS (SSTC Draft EIS) at 3.11-13, Fig. 3.11-4. The San Diego fairy shrimp is among the most endangered species in the country; on a scale of 1-18, with one being the highest, the San Diego fairy shrimp ranks as a "2 " on the recovery priority scale. See SSTC Draft EIS at 3.11-12.</p> <p>So far, the Navy has taken important steps to protect the San Diego fairy shrimp. Under the current management plan, the Navy "restricts all activities from the [vernal] pools at all times."</p>	<p>In response to this and other comments received, the Navy has revised the EIS analysis on the California least tern (Section 3.12.3.1 of the FEIS) and the western snowy plover (Section 3.12.3.2 of the FEIS) to provide a more in-depth analysis of impacts that training is expected to have on the species. Additional analysis has been provided on the indirect and direct impacts of current and proposed military training, to include both an average anticipated impact as well as a high-intensity anticipated impact. Noise impacts are analyzed for the listed avian species. Additional mitigation measures have been added to the Proposed Action. The benefits of current and proposed mitigation are also described. As discussed in the analysis, the benefits of mitigation are expected to outweigh potential adverse impacts of training. The Navy has consulted with the USFWS, and received a Biological Opinion which indicates that proposed training activities will not jeopardize the continued existence ESA-listed species. The EIS does analyze noise and its effect on wildlife. Existing noise levels do not appear to cause nest abandonment, and projected noise levels are not very different, considering the noise source location and the location of nesting avian species.</p> <p>Vernal pools - The Navy will avoid the occupied vernal pools</p>

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		<p>See SSTC Draft EIS at 3.11-33. But now the Navy plans to roll back protections for the San Diego fairy shrimp and "allow foot traffic associated with training activities in vernal pools when conditions are dry." See SSTC Draft EIS at 3.11-41. The Navy has failed to explain why it needs to allow foot traffic in vernal pools that house a critically endangered species or how allowing foot traffic in the pool when the Navy deems the pools "dry " protects the San Diego fairy shrimp. By failing to provide this information and analysis, the Navy has failed to take a hard look at the environmental impacts of its proposed increased training.</p>	<p>and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
304.	San Diego Bay Council	<p>A. The Navy Fails to Explain Why It Needs to Allow Foot Traffic in the San Diego Fairy Shrimp’s Vernal Pools to Meet the Project’s Basic Purpose of Improved Training.</p> <p>The Navy suggests that it needs to allow foot traffic in the vernal pools because some training activities require space to maneuver. See SSTC Draft EIS at 3.11-43. But the Silver Strand Training Complex—South is 548 acres of land, and the San Diego fairy shrimp has been found in vernal pools taking up only around 4 acres of land. See SSTC Draft EIS at 1-3; 3.11-13, Fig. 3.11-4. The Navy does not explain why walking in those very small, ecologically fragile areas is fundamental to providing better training. Further, the Navy suggests that allowing foot traffic in the vernal pools is "needed " if "other areas are scheduled and no other training areas are available " See SSTC Draft EIS at 3.11-43. In other words, the Navy wants to trade protection of a critically endangered species for added scheduling convenience—for only 11 of the 78 different activities the Navy schedules. See SSTC Draft EIS at 3.11-43, 2-26. The Navy also suggests that walking in the vernal pools might be "needed " for "training diversity " without</p>	<p>Information on the necessity of realistic training activities at SSTC-S has been added to Section 3.11.2.3.3. Some vernal pools will need to be used for training. Restricting training to other areas would decrease the efficacy of training activities.</p> <p>The Navy will use scheduling and planning measures to minimize the potential for incidental take of San Diego fairy shrimp. The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As</p>

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		<p>explaining what "training diversity " walking in the vernal pools would provide—other than trampling a fragile ecosystem.</p> <p>B. The Navy Fails to Analyze the Impacts to the San Diego Fairy Shrimp of Allowing Foot Traffic in the Vernal Pools When the Pools are "Dry"</p> <p>The Navy proposes to allow people to tramp through the vernal pools the San Diego fairy shrimp call home when a botanist or wildlife biologist determines that the pools are "dry. " See SSTC Draft EIS at 3.11-43. The Navy has not analyzed the environmental impacts of this plan to the existing fairy shrimp populations or to the ongoing viability of the fairy shrimp population at Silver Strand Training Complex—South.</p>	<p>presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
305.	San Diego Bay Council	<p>1. The Navy May Determine the Vernal Pools are "Dry" when Fairy Shrimp are Maturing or Adult Shrimp are Present.</p> <p>The Navy anticipates that the vernal pools will be deemed "dry" "50 to 95 percent of the year", which could also include "intermittent times during the rainy season, rather than during a defined dry period. " See SSTC Draft EIS at 3.11-43. The Draft EIS does not explain how the "qualified person" overseen by a Navy botanist or wildlife biologist will determine when the vernal pools are wet or dry. See SSTC Draft EIS at 3.11-43. The fact the Navy anticipates that or Endangered Species Act Section 7 consultation on green sea turtle at SSTC. □National</p> <p>The Draft EIS recognizes that "[a]dult San Diego fairy shrimp are observed from January to March" but "in years with early or late rainfall, the hatching period may be extended. " See SSTC Draft EIS at 3.11-12. The Navy’s 2002 Integrated Natural Resource Management Plan for the Naval Base Coronado (the "2002 Plan") also acknowledges that San Diego fairy shrimp "may appear after late fall, winter, or spring rains sufficiently fill their small, shallow pools (&lt;30 cm deep)" and "[o]nce hatched, the fairy shrimp will mature in 10-20 days...and can live for over</p>	<p>As listed in the FEIS and in the signed Biological Opinion (July 7, 2010), the Vernal Pool Management and Monitoring Plan will list: 1) what criteria are used to determine that the pools are dry, and 2) who makes the “dry” determination, i.e., the qualifications of the person responsible for determining wet and dry conditions. The person overseeing the determination will have a USFWS fairy shrimp permit.</p> <p>The estimate that the pools could be dry 50-95 percent of the time was based on a much drier than average year. The intent was not to plan to train in the pools that much of the year unless they were actually dry, but, rather, to attempt to</p>

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		<p>a month." See 2002 Plan at 3-76, citing Eriksen and Belk 1999. But the Draft EIS provides no explanation of how the vernal pools could be dry up to 95% of the year when adult shrimp can be observed for at least 25% of the year and possibly in late fall, winter, or spring. Either this means that the Navy anticipates determining the vernal pools are "dry " when there are still adult fairy shrimp present, or the Navy has serious flaws in its analysis.</p>	<p>determine the maximum number of people who might cross the vernal pools on foot in any given year so the Navy could avoid underestimating impacts.</p>
306.	San Diego Bay Council	<p>2. The Navy Cites No Scientific Evidence That Allowing Foot Traffic Through the Vernal Pools When "Dry " Will Protect the Fairy Shrimp Population.</p> <p>The Navy attempts to justify purposely scheduling foot traffic in the vernal pools when the pools are "dry " because "[t]his is the time when the shrimp are least vulnerable because they are encased in hard cysts at or near the soil surface-awaiting the return of wet conditions. " See SSTC Draft EIS at 3.11-44. But the Navy provides no evidence that the force of foot traffic through the vernal pools will not crush the fairy shrimp cysts.</p> <p>On the contrary, it is well-settled that human encroachment into San Diego fairy shrimp habitat on foot or on motorized or non-motorized vehicles affects the species by crushing San Diego fairy shrimp cysts. See San Diego Fairy Shrimp 5-Year Review, U.S. Fish and Wildlife Service, 2008 ( "5-Year Review") at 28. Scientists have demonstrated that San Diego fairy shrimp cysts can be crushed under minimal weight-less than 100 grams, or 0.2 pounds, of force—when dry. See 5-Year Review at 28, citing Hathaway et al. (1996). Because cysts are so fragile, even when the vernal pools are dry, allowing people to walk or run through the vernal pools will crush and destroy the fairy shrimp cysts.( The American Academy of Podiatric Sports Medicine estimates that, while running, the feet strike at a force of three to four times the body's weight. See <a href="http://www.aapsm.org/running.html">http://www.aapsm.org/running.html</a>)</p> <p>The Navy has not analyzed the short-term or long term impacts of allowing foot traffic in the vernal pools when they are "dry. " The Navy "conservatively " estimates that "10 percent of the people conducting training activity would enter into the vernal pools. " See SSTC Draft EIS at 3.11-43. The Navy provides no explanation of why this estimate is conservative other than "each activity is dispersed across the vernal pool area. " See SSTC Draft EIS at 3.11-43. And even under the conservative estimate, the Navy still anticipates that 207 people could enter the vernal pools each year. See SSTC Draft EIS at 3.11-43.</p>	<p>The Navy has analyzed for take of fairy shrimp cysts, and acknowledged that fairy shrimp cysts will be crushed and otherwise harmed, such as by displacement into areas they cannot survive. For this reason, the USFWS has issued a take allowance for the training activity as listed in the signed Biological Opinion (July 7, 2010). The conservative estimate of the number of people that would enter the pools each year was estimated by considering the percent of the training area occupied by pools, and overlaying the footprint of each of the different activities that could enter the pools. The Biological Opinion also concludes that the Proposed Action is not likely to jeopardize the continued existence of this species.</p>

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307.	San Diego Bay Council	<p>The Navy has not analyzed what effect moving from no foot traffic to over 200 people tramping through the vernal pools each year will have on the short-term and long-term viability of the San Diego fairy shrimp population. The Navy acknowledges that the fairy shrimp could be negatively impacted by being moved to unsuitable locations or by changing the topography or water quality in the vernal pools, but never acknowledges that foot traffic can and will crush fairy shrimp cysts. See SSTC Draft EIS at 3.11-44. Because the Navy ignores the reality that foot traffic in the vernal pools will crush cysts, it never analyzes how devastating foot traffic will be to the long-term viability of the fairy shrimp.</p> <p>San Diego fairy shrimp cyst "banks " develop in pool soils that are composed of cysts from several years of breeding. See 5-Year Plan at 5. This partial hatching of cysts allows the San Diego fairy shrimp to persist in its extremely variable environment, since pools commonly fill and dry before hatched individuals can reproduce, and if all cysts hatched during an insufficient filling the species could be extirpated from a pool. See 5-Year Plan at 28, citing Philippi et al. 2001, Simovich 2005a, Simovich and Hathaway 1997. The U.S. Fish and Wildlife Service has emphasized that the ability of San Diego fairy shrimp to develop and maintain cyst banks is vital to the long-term survival of San Diego fairy shrimp populations. See 5-Year Plan at 5, citing Ripley et al. 2004, Simovich 2005a.</p> <p>The Navy must take a hard look at the long-term impacts of foot traffic on the fairy shrimp. The U.S. Fish and Wildlife Service has cautioned that cyst-crushing impacts, like foot traffic, may accumulate over time, leading to a decline of cysts below a number necessary to support a viable population. See 5-Year Plan at 17. The Navy must do a thorough analysis of the impact of its proposed plan on the critically endangered San Diego fairy shrimp. The Navy must at least address the following questions:</p> <p>Which vernal pools at Silver Strand Training Complex-South have cysts in them?                      How many steps will be taken in each vernal pool each year?                      How many cysts will be crushed by each footstep in the vernal pool?                      How many cysts are in each vernal pool?                      How many cysts need to survive in order to ensure a long-term viable population of fairy shrimp?                      How will the foot traffic in the vernal pools impact fairy shrimp breeding?                      What impact will long-term foot traffic through the vernal pools have on the fairy shrimp population at Silver Strand Training Complex—South?</p> <p>Answering these questions is crucial not only to comply with the Endangered Species Act, but to meet the National Environmental Policy Act’s requirements that the Navy take a hard look at the environmental impacts of its proposed project. Without answering these questions, the Navy cannot meet its National Environmental Policy Act obligations.</p>	<p>The Navy has made educated assumptions to base its estimate of impact to vernal pools, and has requested a take allowance from the USFWS for the impact, which is expected to be low. The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>

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308.	San Diego Bay Council	<p>3. The Navy Must Survey Existing Fairy Shrimp Populations in Order to Analyze the Impacts of the Proposed Action on the Fairy Shrimp.</p> <p>The Navy’s analysis in the Draft EIS is based on a study from 2003 of whether or not the San Diego fairy shrimp was present in a vernal pool. See SSTC Draft EIS at 3.11-13 Fig. 3.11-4. Before taking such a drastic measure as to allow foot traffic in the vernal pools, the Navy must gather more updated information about the existing population of fairy shrimp in vernal pools at the Silver Strand Training Complex-South. The Navy should have been monitoring fairy shrimp populations under its plan set forth in the 2002 Plan, as the plan states that the Navy will "monitor the status of the fairy shrimp population." 2002 Plan Coronado at 4-29.</p> <p>According to the Draft EIS, the Navy plans to start surveying for the fairy shrimp every five years. See SSTC Draft EIS at 3.11-43. But relying on 7-year old information as a baseline and then not looking at impacts to the fairy shrimp population for 5 years is insufficient to protect the critically endangered fairy shrimp. In 5 years, the Navy could potentially cause such extensive damage to the fairy shrimp as to devastate the population. This is directly contrary to the Navy’s promise in the 2002 Plan to "seek opportunities to restore vernal pool habitats that have been disturbed, while considering potential impacts to the federally endangered San Diego fairy shrimp." See 2002 Plan at 4-29.</p>	<p>The Navy will determine the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinstate consultation with the USFWS. Monitoring will be conducted annually per the Biological Opinion.</p> <p>Consistent with the USFWS Biological Opinion, the Navy will mark pools to facilitate monitoring, and monitor the occupied vernal pools and their watersheds at the SSTC-S Inland to determine the baseline and ongoing conditions regarding: San Diego fairy shrimp distribution and abundance; botanical resources; topography; hydrology; and water chemistry (including salinity). The Navy will submit a draft monitoring plan to USFWS and allow USFWS at least 30 days to review and approve this plan. The plan will include a map of SSTC-S Inland training area boundaries and vernal pools, and the following provisions to establish baseline conditions: a) focused invasive plant survey including visual/photo point inspection of vernal pools and their watersheds; b) plant, topographic, hydrological and water quality surveys/data; and c) protocol fairy shrimp surveys of the vernal pools. The plan will outline the qualifications necessary for personnel that determine if all the pools in a given unit are “dry”, as well as the methodology for determining that the pools are dry. The plan will include the following provisions for monitoring ongoing conditions to determine if training impacts have occurred: a) focused invasive plant monitoring and visual/photo point inspection of vernal pools and their watersheds annually; b) plant, topographic, hydrological and</p>

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			<p>water quality monitoring every 2 years; and c) protocol fairy shrimp surveys of the vernal pools every 3 years. Annual monitoring reports will identify management measures to minimize any training impacts detected by monitoring (e.g., spread of invasive weeds, change in pool topography). The results of each year’s monitoring will be submitted to USFWS annually. Baseline monitoring will be completed prior to initiating training activities in or around the vernal pools at SSTC-S Inland.”</p> <p>In summary, focused invasive plant surveys, including visual/photo point inspection of vernal pools and their watersheds, will be done annually. Plant, topographic, hydrological, and water quality monitoring are to be done every two years, and protocol fairy shrimp surveys are to be done every three years.</p>
309.	San Diego Bay Council	<p>C. The Navy’s Plan to Allow Foot Traffic in the Vernal Pools is Inconsistent with the Navy’s Commitments it Made to Protect the San Diego Fairy Shrimp.</p> <p>The Navy’s plan to reverse its prior policy of protecting the San Diego fairy shrimp at Silver Strand Training Complex-South reneges promises made to "provide a benefit to the San Diego fairy shrimp." See Designation of Critical Habitat for San Diego Fairy Shrimp, 72 Fed. Reg. 70,648, 70,678 (Dec. 12, 2007).</p> <p>When the U.S. Fish and Wildlife Service designated critical habitat for the San Diego fairy shrimp, it considered designating vernal pools at the Silver Strand Training Complex-South as critical habitat (The Silver Strand Training Complex-South was referred to as the "Naval Radio Receiving Facility" in the Federal Register in 2007). But the U.S. Fish and Wildlife Service determined that conservation efforts in the 2002 Plan "provide a benefit to the San Diego fairy shrimp." 72 Fed. Reg. 70,678. Based on those conservation measures, the U.S. Fish and Wildlife Service exempted vernal pools at Silver Strand Training Complex-South from critical habitat designation under Section 4(a)(3) of the Endangered Species Act.</p> <p>Endangered Species Act §4(a)(3)(B)(i) provides that the Secretary of the U.S. Fish and Wildlife Service shall not designate lands controlled by the Department of Defense as critical habitat if the land is: (1) subject to an integrated natural resources management plan and (2) if the Secretary determines in writing that such plan provides a benefit to the species. See 16 U.S.C. § 1533(a)(3)(B)(i). In 2007, the U.S. Fish and Wildlife Service determined that the 2002 Plan protected and benefitted the San Diego fairy shrimp.</p>	<p>The 2002 INRMP for Naval Base Coronado is being updated revised, and will reflect the content of this EIS. The vernal pool management measures proposed are new, and the USFWS will decide if the Navy still provides a benefit to the pools, and whether critical habitat should be designated on Navy land regardless of the INRMP currently being updated. The Navy provides invasive species control, inventory, and periodic surveys. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys.</p> <p>The Navy’s analysis was based on the best available science; however, there is inherent variability and uncertainty. It is correct that the Navy does not know the impact that introducing training to this area will have on occupancy of the vernal pools. As part of the conditions of the Biological</p>

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		<p>Specifically, the U.S. Fish and Wildlife Service determined that the Navy would protect and benefit the San Diego fairy shrimp because the Navy promised in the 2002 Plan to: (1) monitor the status of San Diego fairy shrimp populations; (2) post signs around vernal pools; (3) advise personnel to keep vehicles on the main roads while traveling through the property; and (4) seek opportunities to restore disturbed vernal pool habitats while considering potential impacts to the San Diego fairy shrimp. See 72 Fed. Reg. 70,678.</p>	<p>Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>With regard to critical habitat, the National Defense Authorization Act of 2004, Public Law 108-136 recognizes INRMP conservation measures and species benefit that could obviate the need for critical habitat designation on Navy lands. As mentioned above, the Navy is developing a Vernal Pool Management Plan, and is being issued approval for incidental take under the ESA (the USFWS Biological Opinion concurs that the Navy will not affect the viability of the species).</p>
310.	San Diego Bay Council	<p>The U.S. Fish and Wildlife Service also determined in 2007 that "[a]ctivities occurring on [Silver Strand Training Complex-South] are currently being conducted in a manner that minimizes impacts to San Diego fairy shrimp habitat." 72 Fed. Reg. 70,678. In 2007, management of vernal pools under the 2002 Plan restricted "all activities from the pools at all times." SSTC Draft EIS at 3.11-33.</p> <p>The Navy's plan to degrade the vernal pools by allowing foot traffic through the pools and authorizing emergency vehicles to drive through the pools is a sharp departure from its prior management. The Navy is essentially pulling a "bait and switch" on the U.S. Fish and Wildlife Service, escaping protective critical habitat designation for its land based on a management plan it is scrapping just three years later. The Navy plans to allow emergency vehicles to drive in the vernal pools, despite the fact that the U.S. Fish and Wildlife Service "consider[s] vehicle use in vernal pool habitat" a substantive threat to the San Diego fairy shrimp." 5-Year Review at 17. And the Navy plans to allow virtually unrestricted foot traffic in the vernal pools without first surveying the extent of existing fairy shrimp populations and analyzing the impact the inevitable crushing of fairy cysts will have on the ongoing viability of the critically endangered San Diego</p>	<p>This is a reference to the INRMP for Naval Base Coronado, which is being revised and will incorporate the measures described in this EIS. National Defense Authorization Act of 2004, Public Law 108-136 to recognize INRMP conservation measures and species benefit that could obviate the need for critical habitat designation on Navy lands. The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the</p>

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		<p>fairly shrimp population at Silver Strand Training Complex-South.</p> <p>The Navy’s plan to allow foot traffic and emergency vehicles in the vernal pools at Silver Strand Training Complex-South could be disastrous for the critically endangered San Diego fairy shrimp. The Navy should abandon this ill-conceived and un-examined plan unless and until it can demonstrate with a thorough and honest analysis that the plan will satisfy the Navy’s promise to "provide a benefit to the San Diego fairy shrimp." See 72 Fed. Reg. 70,678.</p>	<p>USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS. The Navy prohibits driving of vehicles off of established roads at SSTC-S Inland, There may be infrequent emergency vehicle use in emergency situations The Navy does not have a record of such use in the pools, and the Navy anticipates that such an occurrence might never happen. Yet the possibility of cyst crushing and displacement by emergency vehicles is acknowledged in the EIS.</p>
311.	San Diego Bay Council	<p>CONCLUSION</p> <p>The Navy must analyze the direct, indirect, and cumulative impacts that pollutants from grenades, flares and explosives will have on water quality. It should provide scientifically-supported analysis of those impacts in the final environmental impact statement. The Navy still needs to take a hard look at the impacts the increased training will have on public access to the ocean, bay, and beaches, air quality, traffic, and noise.</p> <p>The Navy’s analysis of the proposed project’s impacts to endangered species such as the western snowy plover, the California least tern, and the San Diego fairy shrimp is woefully inadequate. The Navy cannot withhold serious environmental impacts analysis from the public during the NEPA process, regardless of any future plans the Navy might have to work with U.S. Fish and Wildlife Service to satisfy Endangered Species Act requirements. The National Environmental</p>	<p>Water Quality impacts are addressed in Section 3.5.2.3.2, Section 3.5.2.4.2, and Section 4.3.5 of the FEIS. That analysis concluded that trace amounts of training material residues – most of which are deposited on land rather than in the water – would not have a substantial direct or indirect effect on water quality. Federal and State of California water quality standards would not be violated. Discharges from regional wastewater treatment plants, other industrial facilities, and non-point source pollutant discharges affect ocean and Bay water quality; however, these pollutants generally differ in type (e.g., coliform bacteria, nitrogen, phosphorus) from the residues of</p>

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		<p>Policy Act requires that the Navy take a hard look at all the reasonably foreseeable environmental impacts of the project-that it look before it leaps-and that the analysis be available to the public to fully vet the information. The Navy has not met its burden with regard to the San Diego fairy shrimp.</p>	<p>training activities, so there is no substantial cumulative effect.</p> <p>The Navy has consulted with the USFWS, and the signed Biological Opinion (July 7, 2010) concluded that the Proposed Action would not jeopardize the continued existence of ESA-listed species. This Biological Opinion has been integrated into the EIS, including any additional mitigation measures (Section 5). The Navy's analysis is a matter of public record. All effects that can be anticipated by the action have been addressed. With implementation of the Proposed Action, losses in California least terns and western snowy plover nesting are expected to be minimally increased from baseline levels. The Navy and U.S. Fish and Wildlife Service (USFWS) have established mitigation measures to compensate for these losses.</p>
312.	Sierra Club, San Diego Chapter	<p>At this time the Sierra Club is not requesting additional protective measures outside the current prevailing policy. In this regard, we strongly support the No Project alternative unless substantial improvements to the protectionist measures are made to Alternative 1. However, the Sierra Club alternatively makes its position known that Alternative 2 is highly undesirable in large part due to the reckless and permanent damage that will befall the endangered California Least Terns and Snowy Plovers in the project area. San Diego County has more endangered species than any other county in the United States. If biodiversity indicates ecological well-being, San Diego County should be diagnosed with a near fatal disease and the only treatment is an aggressive stance for protection and conservation. The proposed increase in training operations has the catastrophic potential of affecting 13-20% of the statewide California Least Tern population as well as some of the most important Snowy Plover nesting habitats in Southern California.</p> <p>If increased training operations are found to be an absolute necessity, preferential training sites must be identified. Those sites should be areas with the least possible amount of nesting and foraging. In order to properly identify these areas, the Navy must actively engage in research, data collection, and monitoring activities. Upon critical examination of the data collected, optimal nesting and foraging sites can be properly designated and military training can be conducted in accordance with all necessary precautions.</p>	<p>The Navy's program for more than 30 years has resulted in adaptive measures that have permitted both bird species to thrive, and further measures are proposed to minimize harm to the species. The Navy has allowed for a least tern and snowy plover haven to develop while providing protection over the last decades, to the extent that the Navy is managing an increasing percentage of the statewide populations (See Table 3.12-3 of the FEIS). The latest mitigation measures, listed in Section 3.12.1.5 of the FEIS, detail the current status of the Navy's stewardship of least terns and snowy plovers in San Diego Bay. Under the Proposed Action, the Navy will develop a Long Term Habitat Enhancement Plan for SSTC-N.</p> <p>Alternative 2 will not in reality translate into full scale use of the set aside training lanes or automatic loss of western snowy plover nests. Training lanes hold different value for each type of training due to various factors, and the birds actually tend to nest in areas where less training occurs. The DEIS has been amended to explain the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The</p>

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			<p>difference in incidental take for snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year.</p> <p>As described in the FEIS and the signed Biological Opinion (July 7, 2010), the Navy will implement a mitigation measure to schedule training in areas where less nesting occurs, when possible, and still meet training needs. In addition, the Navy will schedule training activities that could be conducted on the hardpack portion of the beach during low tides when it is consistent with training needs. The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that do not encumber training activities. Such a marking strategy may entail signage affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>The extensive monitoring program that the Navy implements has allowed for adaptive management to ensure avoidance and minimization of take, as well as positive contribution to recovery of both species. Nesting activity has increased despite the average historical annual loss of 38 nests (Figure 3.12-9), indicating a capability of the species to not only continue to persist on SSTC, but also to increase, with training occurring in the nesting beaches during the nesting season. Much of this has to do with the Navy’s mitigation measures and management practices. Based upon the available data, training activities at historical and proposed levels appear compatible with persistence of the least tern and western snowy plover at SSTC. Nesting areas have already been set aside on the bay side of the Silver Strand that exceed the mitigation required for all past and current consultations.</p>

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313.	Sierra Club, San Diego Chapter	<p>Vernal Pools Vernal pools are environmentally important and highly sensitive areas. Vernal pools have been around for thousands of years, at their peak there were approximately 28,500 acres of vernal pool habitat in San Diego County. By 1986, only 7% of those acres remained. A 1997 a report indicated that 70% of the remaining vernal pools were found on N.A.S. Miramar or Camp Pendleton. By 1995 95% of the vernal pools were destroyed. In 2001 it was reported that 2,400 vernal pools existed, and presently only 3% of the area's vernal pools remain.</p> <p>In order to preserve this ever-diminishing vital natural resource, the Sierra Club endorses the continuation of the Navy's existing policy restricting all activities from vernal pools at all times. We appreciate the Navy's environmental intentions through the proposed wet season closures of the vernal pools. However, the limited closure is not sufficient to sustain the resource. Several species reside in this habitat, including endangered species like the San Diego Fairy Shrimp (<i>Branchinecta Sandiegonensis</i>). The Fairy Shrimp find the vernal pools indispensable to their lifecycle when they are inundated with water as well as when they are dry.</p> <p>By the Navy's own admonition (see Table 3.11-3) both Alternatives 1 and 2, could adversely impact the Fairy Shrimp. Dry season impacts from potentially high volumes of foot traffic (12 to 207 individuals per year estimation, DEIS 3.11-43) carry with it the high probability of causing an extinction of the species. The fairy shrimp cysts (eggs) can be crushed and damaged, especially during the dry season. Foot traffic through the area would not only result in destruction of the cysts, but also allow for the introduction of invasive weeds, as soils are disturbed and changes to watershed hydrological system occur. As the soldiers traverse through the SSTC they are walking through areas that contain weedy species, and the seeds become attached to the soldier's shoes, clothing, and equipment. The seeds once transmitted to the vernal pools act as an invasive species resulting in shadowing, increased evaporation and transpiration rates, degrading the hardpan. Moreover, the USFWS has recognized that habitat degradation (and loss) is the single greatest threat to a species' survival. The Sierra Club would strongly encourage the Navy to continue working closely with the USFWS to implement the findings of their Biological Opinion when it is completed. What the plan requires is the designation of an area off-limits from training operations while data is collected and evaluated. The area would consist of all the existing and identified vernal pools. While the Navy does place a limit on the amount of activity when other shoreline areas are occupied, unavailable, or less suitable for training, this limitation merely bestows unfettered discretion and no actual limitations. An appropriate method, which should be explored as an alternative, in order to protect vital natural resources and critical habitat, is placing and maintaining, clearly designated barriers within 100 feet of the vernal pools and their functional watershed.</p> <p>It is also strongly suggested that the Navy conduct new baseline studies, since those studies currently in use were conducted over seven years ago, between 2001 and 2003. Thus, the current conditions remain unknown and the only means of arriving at an adequate accounting of the pools, which currently contain Fairy Shrimp, is to conduct a more recent survey. Until such time</p>	<p>The Navy will use scheduling and other planning tools to minimize impacts to vernal pools, as listed in the FEIS (Section 3.12 and Section 5) and the signed Biological Opinion (July 7, 2010). The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7, marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will identify measures to minimize the potential for adverse effects to fairy shrimp from weed abatement, pool restoration, or pool augmentation. The Navy will be establishing the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>Dry season disturbance is not likely to result in species extinction or extirpation from the site, due to summer dormancy of the shrimp as a cyst, and the low level of foot traffic expected. The USFWS has issued a take allowance for the proposed disturbance to the pools, as described in the signed Biological Assessment (July 7, 2010).</p> <p>The Navy conducts annual surveys and treatment for invasive plants, and in recent years has been expanding treatment of iceplant.</p>

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		<p>that a sufficient and timely survey has been performed, all pools exhibiting reasonable conditions for habitability by Fairy Shrimp should be fenced for protection of the species.</p> <p>It is unwise to estimate the damage that could be caused to the complex ecology of the vernal pools from increased foot traffic. The Navy should proceed with their existing policy: restricting all activities from the pools at all times. If the Navy plans to proceed with the increased training operations within areas where vernal pools are known to exist, a multiyear analysis must be performed in order to fully evaluate the adverse impacts to the fairy shrimp and to the basic hydrology of the pools.</p> <p>The Navy must also make note that species on the threatened and endangered lists are to be protected so they may achieve such numbers as to be delisted. The only methodology capable of achieving this goal is to protect their critical habitats. In the case of the San Diego Fairy Shrimp that critical habitat is the vernal pools during both the wet and dry periods.</p>	

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314.	Southwest Wetlands Interpretive Association	<p>There is concern that potential additional operations could affect 13-20% of the statewide California Least Tern Population as well as some of the most important Snowy Plover nesting habitat in southern California but through cooperative effort with agencies like the USFWS this may be resolved. It is assumed the effects of training on Least Tern nesting sites at lanes 1-7 north of Silver Strand State Beach, SSSB, are compatible. Is there enough research data to support the concept of compatibility between tern nesting and training exercises at this site? This makes the important assumption that these birds are able to adapt to these activities without disruption which is important to know as training escalates. It is our hope that research and data collection will be carried out at this site and help answer these important questions about bird adaptation and military training.</p> <p>We hope that there will be a high level of protection for Least Tern nesting and foraging including lanes 8 through 10.</p> <p>Preferential training should be considered in lanes with the least nesting and foraging. But research, data collection and monitoring should lead to better management enhancing training and environmental protection.</p> <p>We also want to encourage a high level of protection at Delta II North and Delta I South. These have been successful nesting and recruitment sites and we hope that they will continue to be maintained through management, and monitoring.</p> <p>We hope that ongoing operations will be designed to maintain optimal nesting and foraging while carrying out the military mission.</p>	<p>The Delta Beaches will continue to be managed consistent with agreements with USFWS, to encourage nesting at these locations.</p> <p>Preferential training will occur under Alternative 1. The criteria for using Blue 2, Orange 1, or Orange 2 are listed in Chapter 2 of the EIS</p> <p>The Long Term Site Enhancement Plan, which is part of the Proposed Action, could increase the carrying capacity for terns by hundreds of nests. For snowy plovers, the long-term site enhancement plan is estimated to realistically mitigate for an estimated 34 nests annually.</p> <p>The FEIS quantitatively estimates the amount of benefit provided by Navy management above and beyond that required by past projects, and that can be considered avoidance, minimization, and offsetting measures related to training. Besides setting aside real estate, the most important mitigation measure is probably predator control. The Navy has a number of predator management and control measures that it implements throughout the breeding season to minimize impacts of predators, including avian predators, ants, and mammals (see Section 3.12.1.5.3 of the FEIS for more detail). Predator control is considered by many species experts to be one of the most crucial management strategies for reproductive success (Foster 2006; USFWS 2006c).</p>

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315.	Southwest Wetlands Interpretive Association	<p>Other issues that must be addressed include protection of vernal pools, predation and use of military working dogs.</p> <p>We believe that vernal pools should be monitored and that research data collection will enable a reasonable approach to management meeting the needs of military operations and environmental protection. These sensitive habitats should be incorporated into biological off limit areas for training while data collection is evaluated.</p>	<p>Military working dogs are highly trained and under constant voice or leash control of the handler. While effects of recreational dogs in nesting areas are documented in scientific literature, the effects of leashed dogs that are highly trained in obedience and avoidance of wildlife in an area that is heavily used for military training is not yet known.</p> <p>As a result of the consultation with USFWS, the Navy is proposing a study to assess impacts of MWDs military working dogs on California least tern and Western snowy plover nesting such that potential effects can be better understood. In compliance with the USFWS Biological Opinion (signed July 7, 2010), the NBC Natural Resources staff will brief all dog handlers annually, or more frequently if necessary, on guidelines pertaining to the use of military working dogs on SSTC beaches. These include that military working dog handlers will be notified weekly of the locations of plover nests and, to the maximum extent possible, remain a minimum of 30 meters (90 feet) from markers that delineate the locations of nesting plovers. If physical conditioning on soft pack sand is necessary, handlers and military working dogs will run on the sand road (SSTC-N) or within 20 feet of the hardpack sand to reduce the disturbance and impact to nesting terns and plovers. At SSTC-N, military working dogs will exercise primarily between beach lanes Yellow 1 and Blue 1, where they may cross the beach to get to the sand road at the existing route immediately to the north of the demo pit. The Navy will not conduct physical conditioning using dogs in the southern three beach lanes until: a) completing a study to evaluate the effects of military working dogs on terns and plovers and b) coordinating with the USFWS to develop conservation measures to minimize any additional effects. If military working dog training is requested as part of Platoon Over-the-Beach activities at SSTC-N, these activities will be scheduled in beach lanes Yellow 1, the northern half of Yellow 2, Green 1, or Green 2, pending the results of the Navy's study to evaluate the response of terns and plovers to</p>

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			<p>military working dog presence. The Navy will coordinate with the USFWS in the development of the study, and will submit the study design and scope of work to the USFWS for review and approval.</p> <p>In compliance with the USFWS Biological Opinion, the Navy will use scheduling and/or planning measures to minimize the potential take of San Diego fairy shrimp, will establish the baseline distribution and abundance of San Diego fairy shrimp and condition of their vernal pool habitat at SSTC-S Inland and monitor training activities to ascertain the impact of training activities on San Diego fairy shrimp distribution and abundance within the action area, will report the monitoring results and any observed incidental take to the Service annually, and will manage the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring (including fencing off several pools). The DEIS was revised to indicate these terms and conditions.</p>
316.	Southwest Wetlands Interpretive Association	<p>Predation is a serious problem. The Gull Billed Tern presents a danger for tern and plover chicks. It is not a listed species at this date but is under consideration. Predation is exacerbated by habitat loss for all these species and this problem must also be addressed.</p> <p>Using the Endangered Species Act to protect a species must be solely a decision made by qualified scientists. The decision to list or delist a species must be made by the recovery team and should never be influenced by political policy and or public pressure.</p> <p>The utilization of military working dogs should be coordinated in a way that does not lead to environmental impact.</p> <p>The impact on near shore habitat and the interrelationship between the marine and beach ecosystems must be taken into consideration. This is especially important concerning least tern foraging. There is also interest in looking at the impact commercial bait fishing has on least tern foraging along the Silver Strand and the barrier beach at the Tijuana Estuary. The opportunity for research at these two sites has been suggested allowing for a comparative analysis of tern foraging success. Commercial bait fishing and military operations may impact tern foraging. Both sites are important to the bait fishing industry.</p> <p>The potential impact of climate change and sea level rise is of great importance to extended use of the Silver Strand for military operations and as a nesting site for terns and plovers. Sea level rise will have ecological and military impacts at this site. The rise in sea level is at least 10 cm higher than it was in 1974 which is significant. This number is with reference to the TRNERR</p>	<p>Predation has been discussed in FEIS Section 3.12.1.3.1; California Least Tern and Section 3.12.1.3.2; Western Snowy Plover. A least tern foraging study funded by the Navy is underway and is being conducted in full compliance with the ESA. Cumulative impacts with bait fish are discussed in Section 4.3.12 of the FEIS.</p> <p>Gull-billed tern predation studies are also underway by Navy and other funders (including USFWS), and the Navy has requested approval from USFWS to relocate Gull-billed terns, without success. A species viability analysis is under consideration for funding. The USFWS has not officially proposed the California least tern for downlisting. If and when they do, the proposal will be published in the Federal Register and will be open for public comment before a final decision is made.</p> <p>The Navy is working closely with the USFWS to assist it in addressing gull-billed tern predation and impacts to western snowy plover and California least tern. The Navy has submitted an application for a depredation permit to the USFWS Migratory Birds annually since 2005, and has</p>

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		<p>site which is relevant to the Silver Strand and the Cities of Imperial Beach and Coronado.</p> <p>The SSTC-South is also an important issue. There are Western Snowy Plover nests on the beaches at this site. The Navy has not been able to control civilian recreational beach use and off leash dogs. This has been a major issue with the destruction of nests and has led to low population success. A coordinated effort should be made to control this site. The YMCA Camp Surf should be able to continue their youth program but must follow the rules. Violations would lead to potential closure of the site.</p> <p>We want to encourage the Navy to work closely with the USFWS and implement the findings in the Biological Opinion when it is completed.</p>	<p>continued to document the impacts of this species. The Navy is supporting a radio-telemetry study by San Diego State University and USFWS during the 2010 nesting season. This study will research movements of gull-billed terns around San Diego Bay and analyze diet <b>through stable isotopes</b>.</p> <p>As indicated in the USFWS Biological Opinion and described in the FEIS, the Navy will improve the delineation of base boundaries to facilitate improved enforcement in these areas. This delineation will include the installation of improved signage, k-rails, and a guard shack. At SSTC-N, temporary barriers and improved signage will be used to more clearly notify the public of the Navy’s exclusive use of SSTC-N beach and existing restrictions on public usage of those beaches.</p> <p>Military working dogs are highly trained and under constant voice or leash control of the handler. While effects of recreational dogs in nesting areas are documented in scientific literature, the effects of leashed dogs that are highly trained in obedience and avoidance of wildlife in an area that is heavily used for military training is not yet known. As a result of the consultation with USFWS, the Navy is developing a study to assess impacts of MWDs on California least tern and western snowy plover nesting such that potential effects can be better understood.</p>
317.	Southwest Wetlands Interpretive Association	<p>The City of Imperial Beach has worked with the Navy in the past to establish a dog park near the base entry off Silver Strand Blvd. If the legal issues could be worked out between the Navy and the City this would enable people to use the dog park rather than the beach especially during the nesting season. The City and SWIA would also like to work with the Navy on completion of the Coast Trail from Oregon to Mexico. This is dependent upon the ability of the City, County and State to work with the Navy allowing this trail to cross Navy lands on the Silver Strand. The trail concept would go between the eastern Navy fence boundary and Highway 7S then continue to the area previously described as the dog park. From there it would go along Carnation Ave outside Navy land. See the included map.</p> <p>The Dog Park and the coastal trail would help to mitigate recreational beach use and hence allow military operations and protection of plover nesting sites. The dune system from the Coronado/Imperial Beach City boundary to the Silver Strand State beach is in better condition than most dune systems in San Diego County but they are heavily invaded by non native species. State Parks has done a commendable job restoring the dunes along their beach. It is hoped that the Navy and state might be able to look at similar dune enhancement on the Navy lands.</p>	<p>NBC Navy will continue to collaborate on these issues with City of Imperial Beach staff through the established military affairs sub-committee meetings.</p>

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318.	Southwest Wetlands Interpretive Association	The City of Imperial Beach is concerned about increased noise levels as operations are enhanced. We urge the Navy to install a 10:00 PM curfew on high decibel activities. Neighbors need their sleep in order to be ready for work the next day. This is a reasonable request in a suburban area.	The Navy considered time and location of training so as to minimize disturbances to the local community, and does its best to conduct noise-producing activities during the day. However, to train in real-world scenarios that may occur overseas, Navy personnel must train at night. Personnel need to train in these dark, late night conditions to ensure that they are prepared for real-world operations. As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.
319.	Southwest Wetlands Interpretive Association	In conclusion SWIA suggests an organization like the Management Authority that currently exists at the TRNERR be established on Silver Strand. The Navy has been a member of this body since its inception in 1982. This organizational structure has worked successfully to resolve many issues in a way conducive to carrying out the missions of international, federal, state and county agencies, NGO'S, universities, private contractors and jurisdictions including San Diego County, and the Cities of Imperial Beach and San Diego. It also serves as an important forum for public input and can solve problems in their early stages. SWIA played an important role in helping to formulate the TRNERR Management Authority and would be interested in helping to do the same at the Silver Strand site.	The Navy is a signatory to the referenced MOU for Inter-Agency Trail Coordination Committee. The purpose of the MOU is the establishment of a framework for the coordinated planning, alignment, design, and development of trails in the Tijuana River Valley. Members of this Committee have no legislative or administrative authority, and act solely in an advisory capacity. Current and future lands owned or leased within the SSTC jurisdiction boundaries are for military purposes.
320.	Sustainable Wildlands United	<p>Vernal Pools</p> <p>While we appreciate the proposed wet season closure of vernal pools, the closure is not sufficient to sustain the resource. The existing policy restricting all activities from vernal pools at all times should be maintained. Dry season impacts from potentially high volumes of foot traffic (12 to 207 individuals per year estimation, DEIS 3.11-43) would result in mortality of the endangered San Diego fairy shrimp. Crushing of fairy shrimp cysts, introduction of invasive weeds as soils are disturbed and changes to watershed hydrological systems would occur relative to patterns of ground impacts. The impacts associated with establishing repetitive seasonal foot traffic are likely to lead to the loss of San Diego fairy shrimp from the site. The USFWS has acknowledged that habitat degradation (and loss) is the greatest ongoing threat to species survival.</p> <p>To achieve effective and real avoidance, please place and maintain barriers that notice and identify vernal pools and their functional watershed within 100 feet, and maintain existing</p>	<p>The Navy will use scheduling and other planning tools to minimize impacts to vernal pools, as listed in the FEIS (Section 3.12 and Section 5) and the signed Biological Opinion (July 7, 2010). This Biological Opinion concluded that, with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of the San Diego Fairy Shrimp.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7, marked with flexi-stakes) year-round, to the</p>

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		<p>policy restricting all activities at all times.                      For any vernal pool that absolutely cannot be avoided, annual baseline surveys should be conducted. In the event of a survey showing a decline in San Diego fairy shrimp from the previous year, activities should be halted until surveys demonstrate recovery to baseline levels. The proposed surveys in five-year intervals are too infrequent to timely detect significant decline. Annual surveys could allow implementation of protective adaptive management measures to attempt recovery.</p>	<p>maximum extent consistent with training needs. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will identify measures to minimize the potential for adverse effects to fairy shrimp from weed abatement, pool restoration, or pool augmentation. The Navy will be establishing the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
321.	Sustainable Wetlands United	<p>California Least Terns                      The proposed action has the potential to adversely affect a very substantial portion of the statewide California least tern population. The federally-listed endangered least tern is a noteworthy Endangered Species Act success story in terms of breeding pairs, but it has not fully recovered, and as the DEIS indicates (3.12-18), fledgling rates have remained static or declined in recent years.                      Unfortunately, the DEIS discusses the effects of the proposed action on least tern recovery primarily in terms of breeding pairs rather than reproductive success. Reproductive success rates should be an additional criterion for determining the significance of the action’s impacts. In addition, the EIS should evaluate the potential for the action to contribute to impacts to least terns through increased predation or other indirect effects.                      Greater noise from operations are likely to reduce nest productivity for least terns and due to temporary and permanent nest abandonment that leaves eggs and chicks vulnerable to predators. The DEIS, however, omits discussion of noise impacts to these sensitive biological receptors. The EIS should analyze and mitigate for this impact.                      We appreciate the inclusion of avoidance measures in Alternative 1, but remain concerned that the loss of up to 105 least tern nests would represent a significant impact to the species and would impede recovery of the least tern. Additional least tern mitigation or avoidance measures should be incorporated in Alternative 1.                      Western Snowy Plovers                      As noted for the least tern, the EIS should evaluate the potential for the action to contribute to</p>	<p>Reproductive success is a metric that is routinely collected by Navy-funded monitors in the Navy’s biological monitoring program. The Navy monitoring program is probably more intensive than that of any other agency. Background noise levels are sufficiently high that training activity changes results in non-detectable effects. Considering the current success of least tern and snowy plover, noise is not expected to be an issue.                       The Navy's predator control program is expected to address any increasing complication with predators. Gull-billed tern predation studies are also underway by Navy and other funders (including USFWS), and the Navy has requested approval from USFWS to relocate Gull-billed terns, without success. A species viability analysis is under consideration for funding. The USFWS has not officially proposed the California least tern for downlisting. If and when it does, the proposal will be published in the Federal Register and will be open for public</p>

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		impacts to snowy plovers through increased predation (including predation by least terns) or other indirect effects. In addition, the EIS should include a thorough analysis of the direct and indirect noise effects on snowy plovers, and adopt additional mitigation measures for these impacts.	comment before a final decision is made.  The Navy is working closely with the USFWS to assist it in addressing gull-billed tern predation and impacts to western snowy plover and California least tern. The Navy has submitted an application for a depredation permit to the USFWS annually since 2005 and has continued to document the impacts from this species. The Navy is supporting a radio-telemetry study by San Diego State University and USFWS during the 2010 nesting season. This study will research movements of gull-billed terns around San Diego Bay and analyze diet through stable isotopes.
322.	Sustainable Wildlands United	Vernal pool habitat on Fanita ranch is for sale. Perfect fit for "readiness and environmental Protection Initiative"	Navy current guidance and policy is to provide required mitigation on Navy lands. The Navy will keep this information on file should required mitigation require an off-site assessment of mitigation.

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323.	United States Department of the Interior	<p>The primary issue of concern is the U.S. Navy's proposal to significantly expand training activities utilizing helicopters at Silver Strand Training Center (SSTC) South. The U.S. Navy's SSTC South is located immediately west of the South San Diego Bay Unit. The Kaufman Drop Zone, which is located in SSTC South, would experience an increase in helicopter activities based on the DBIS. Proposed changes would result in helicopter activities increasing from 724 flights per year to 1,262 flights per year with actual landings increasing from 4 lands per year to 40 landings per year.</p> <p>It is not clear from information provided what percentage of helicopter flights and landings would occur in SSTC South as compared to SSTC North. Additionally, specific training exercises (e.g., Tactical Recovery of Aircraft and Personnel and Amphibious Raid) would employ between 5 and 16 helicopters at a given time which may fly over the South San Diego Bay Unit. When approaching from the bay side to land at the Kaufman Drop Zone, helicopters may fly low over the South San Diego Bay Unit.</p> <p>These low-altitude flights have potential to adversely affect Refuge resources (e.g. nesting migratory birds, federally endangered California least tern, and federally endangered western snowy plover).</p> <p>The Service is providing the following recommendations to address concerns presented in this comment letter.</p> <p>1. The Final EIS should include a map depicting anticipated helicopter flight routes and heights at SSTC South. The Service recommends flight routes avoid flying over South San Diego Bay Unit and instead travel to SSTC South along routes that avoid important wildlife areas or via the Pacific Ocean. We believe these alternative flight routes would reduce impacts of expanded helicopter training on South San Diego Bay Unit.</p> <p>2. The Final EIS should describe the San Diego Bay National Wildlife Refuge South San Diego Bay Unit in the Affected Environments section. While the DEIS recognizes the Refuge, significant biological resources within this Unit should be fully described. We recommend the Final EIS provide a thorough analysis of effects resulting from proposed expanded training on Refuge resources (e.g., nesting migratory birds, federally endangered California least tern, and federally threatened western snowy plover). We believe that expanded training activities may affect listed species on the South San Diego Bay Unit and recommend the Navy consult under section 7 of the Endangered Species Act with our Carlsbad Fish and Wildlife Office.</p>	<p>The effort put forth by the Navy to manage the least tern and snowy plover also supports other nesting birds as an incidental benefit. The Navy works each year on site-maintenance and monitoring, plus periodic site enhancement to increase the attractiveness of Delta beaches. The Navy's Proposed Action includes: ongoing nesting site preparation at the Delta Beaches; predator management; population monitoring; a Long Term Habitat Enhancement Plan; and measures to eliminate unauthorized recreational trespass, which are all conservation measures that, while they are not the focus of management, benefit other birds. The Navy expects that the implementation of these conservation measures will maintain the suitability of habitat for all birds within the action area over the long term. The Navy's actions will increase the capacity of oceanside beaches and the Delta beaches to accommodate least terns and snowy plovers, as well as other migratory birds. The South Bay Unit is more fully described in the background resource section, but due to its increased distance from training activities, it is assumed that the magnitude of impact will be less than that reported for areas directly impacted by training activities.</p> <p>The Navy has consulted with the USFWS, and received a Biological Opinion (signed July 7, 2010) for take of the listed species associated with military training. Information from the signed Biological Opinion has been integrated into the resource sections, and the mitigation measures are updated as well. This Biological Opinion concluded that, with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of the ESA-listed species.</p> <p>A map presenting flight routes will not be added to the FEIS. However, helicopter overflight patterns are described in Section 3.6 for use in the acoustic analysis.</p>

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324.	Vernal Pool Society	<p>Specifically we've noted that present vernal pool sites will be subjected to foot-traffic only during the dry season months; such activity would eventually destroy the dry pool pan and make the necessary accumulation of rain water eventually impossible; the subject here is the survival of vernal pools. Also, vehicular and/or foot-traffic would destroy an intolerable, even though unspecified, percentage of the cyst embryos.</p> <p>We, of course, recognize the need for trained United States Navy personnel; God bless them; however, we believe the proposed Naval Training activities within the Silver Strand Training Complex and southern near shore areas of Naval Air Station North Island expansions (the specific vernal pool subject herewith) will have a NEGATIVE impact on the endangered species which rely on these areas to at least sustain their populations.</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic, covering a total of 3.2 acres. While harm to cysts is expected and analyzed, the order of magnitude is expected to be a few cysts, compared to an estimated population of tens of thousands if not millions of cysts in these pools.</p> <p>The Navy will use scheduling and other planning tools to minimize impacts to vernal pools, as listed in the FEIS (Section 3.12 and Section 5) and the signed Biological Opinion (July 7, 2010). This Biological Opinion concluded that, with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of the San Diego Fairy Shrimp.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7, marked with flexi-stakes) year-round, to the maximum extent consistent with training need. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will identify measures to minimize the potential for adverse effects to fairy shrimp from weed abatement, pool restoration, or pool augmentation. The Navy will be establishing the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels</p>

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			<p>anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The Proposed Action will not all occur immediately, but slowly scale up over time, and only after the baseline condition of the vernal pools has been established and the Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This gradual process will allow the Navy to evaluate the potential impacts, and take corrective action as necessary.</p>
325.	Vernal Pool Society	<p>Under Table ES-2: Summary of Effects 3.11 Birds, there is no way that this statement in regards to "Birds" from Alternative I and/or Alternative II can be relied upon: "...Loss in California least terns nesting would not decrease the nesting total below the 5,722 annual nests to maintain a stable range wide population, and would be below the 2007 incidental take allowance issued by the USFWS...."</p> <p>Unforeseen impacts will always occur and the populations will continue to be unable to sustain themselves in the long term.</p>	<p>The levels of impact and overall population of birds is discussed in detail in Section 3.12 of the EIS in support of this statement. The Executive Summary is meant to give a general overview of the EIS, while the detailed discussion of each resource area is provided within the individual sections of the EIS.</p>
326.	Vernal Pool Society	<p>Nor is there any reasonable assumption that the following stated impacts from Tab~ ES-2: Summary of Effects 3.11 Terrestrial Biological Resources under Alternative I and for Alternative II, particularly to Vernal Pool species can be relied upon:</p> <p>"...• Foot traffic in vernal pool areas could adversely impact individual fairy shrimp. However, impacts would be minimized, due to the low levels of foot traffic that would occur in the pools, and the limitation of those activities to when the vernal pools are dry. Potential impacts to the San Diego fairy shrimp are also associated with emergency vehicle use of unpaved roads in the vernal pool area.</p> <ul style="list-style-type: none"> <li>• Potential increased training on SSTC</li> <li>• N beach lanes Blue 2, Orange I, and Orange 2 could increase impacts to special status plants and invertebrates in these areas while decreasing impacts at other locations. Some trampling of vegetation at these locations is expected, though the overall effect on non-avian biological resources is expected to be short term and of moderate intensity due to the potential overlap of concentrated activities in the dunes and upper beach areas. These activities do not pose long term impacts, effects are expected to be temporary and cease at the termination of an activity.</li> </ul>	<p>Statements have been made in the Executive Summary of the EIS for the purpose of a cursory overview of the activities and the potential effects. The Executive Summary is meant to give a general overview of the EIS, with the detailed discussion of each resource area provided within the individual sections of the EIS. The detailed discussion about the levels of impact and overall population discussion can be found in Section 3.11 of the FEIS; Terrestrial Biology. New information regarding vernal pools and the restrictions placed upon them (taken from the signed USFWS Biological Opinion with Navy guidance) has been added to Section 3.11 of the FEIS.</p>

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		<ul style="list-style-type: none"> <li>• Increased foot traffic could cause behavioral impacts to surrounding wildlife, though this effect is expected to be temporary.</li> <li>• Various activities have the potential to impact Brand's phacelia on the beach in the Bravo training area...."</li> </ul>	

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327.	Vernal Pool Society	<p>There is no logical reason to assume that the proposed Mitigation measures will negate any impacts which occur despite the Navy's and US Fish &amp; Wildlife Service' best intentions.</p> <p>As to the MITIGATION pleading, we have been of the opinion that no such procedure is any longer viable and therefore not even a conceivable solution for requesting any form of vernal pool destruction permit. The vernal pools that have thus far survived the onslaught of civilization's encroachments have already left them with, we believe, less than 1% (one percent) of their original population. These vernal pool creatures are not just Endangered but CRITICALLY ENDANGERED, and ALL vernal pools are to be protected, NONE available to be offered for mitigation. Upon investigation past mitigation attempts are failures.</p> <p>The species in question and their necessary, supporting ecosystems which remain today require all the protection we can afford them. They CANNOT accept any further impacts if we wish to have any hope for their continued existence let alone expectations for their Recovery. Therefore, we recommend the NO ACTION ALTERNATIVE.</p>	<p>The Navy will use scheduling and other planning tools to minimize impacts to vernal pools, as listed in the FEIS (Section 3.12 and Section 5) and the signed Biological Opinion (July 7, 2010). This Biological Opinion concluded that, with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of the San Diego Fairy Shrimp. The existing analysis concludes that there will be minimal effects to the vernal pool if training only occurs with foot traffic and only when the pools are dry. However, to further reduce the take potential, the Navy will undertake certain measures. Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic, covering a total of 3.2 acres.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7, marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will identify measures to minimize the potential for adverse effects to fairy shrimp from weed abatement, pool restoration, or pool augmentation. The Navy will be establishing the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy</p>

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			<p>shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The Proposed Action changes will not all occur immediately, but slowly scale up over time, and only after the baseline condition of the vernal pools has been established and Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This gradual process will allow the Navy to evaluate the potential impacts, and take corrective action as necessary.</p>

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<b>F.3 PUBLIC HEARING COMMENTS</b>			
<b>IMPERIAL BEACH, CALIFORNIA</b>			
328.	Zeke Mazur	<p>They were talking about having training sessions on the beach, exclusive training sessions. They don't want people around. I think it would be a good idea to have them notify the Union Tribune -- I can't tell if I'm going too fast -- notify and put that on the weather page where they have water temperatures, tide heights and polluted beaches. It would be nice if they had a notice that Silver Strand area is going to be off limits to the public during such and such times. Thank you.</p>	<p>Due to the necessary flexibility inherent in scheduling training activities, it would be extremely difficult to publish notifications in the local newspapers in a timely manner. However, based on your comments and those of others, the navy is investigating various methods by which to notify the public.</p> <p>As stated in Section 3.1.2.2.2 and 3.1.2.3.2 of the SSTC EIS, the Navy will not preclude the public from access to public beach adjacent to active training. Active training does not typically occupy the entire stretch of stretch of beach at SSTC-S, but rather one or two training lanes. The public would be able to continue to use public beach adjacent to active training. On SSTC-N there is no public beach. All beaches, including the beach below the high tide line, is leased from the State of California to the Navy for exclusive military use. On SSTC-S, the Navy owns the beach down to the high tide line. The State of California owns the beach below the high tide line. The Navy is adding new mitigation measures for alerting the adjacent communities about events which may be considered intrusive, as well as posting signage and controls about public access to the beaches.</p>

#	Name or Organization	Comment	Response
329.	James Knox	<p>No organization. My name is James Knox. I had submitted these already. I do have some things I'd like to read out loud. One is on 3.5.1.4.2 and 3.5.1.5.2, the Pacific Ocean, about contaminants, report states that most of the contamination of the area is caused by sewage from the river mouth and/or the South Bay ocean outfall. Storm water runoff has a relatively minor influence on local water quality, which is Table 3.5-5 -- will increase training at the south complex, cause more contaminants to reach the ocean by storm water runoff. Rain events occur mainly in the winter when ocean currents in the area are from north to south. Were seasonal changes and ocean water movement taken into account when the finding of contaminants were formulated?</p> <p>The next is 3.5.1.5.2., Pacific Ocean. I believe that the Silver Strand State Beach does have day and overnight use numbers that were not included in this report. I request in the conclusion that the information presented is not representative of the use of the municipal beach in Coronado. The report in other sections extrapolated information that was used for conclusions without complete numbers, and I believe you could have done it for that particular part of the report. The Navy recreational areas, Gator Beach, Fiddler's Cove and so on, I don't believe should be included as recreational opportunities. They have restricted access not open to the general public. So I think you should only include those that the general public could go to. I can't read it all because we have three minutes.</p>	<p>Section 3.5.1.4.2 of the FEIS - For contamination to occur, the contaminants must be present at the surface during a precipitation event, and the surface must be relatively impervious. Residues from the use of flares and smoke grenades constitute the majority of contaminants from training at SSTC. These materials are widely dispersed over the training areas at very low concentrations. Wind erosion of sand and loose surface soils likely results in further dispersal of these materials. When precipitation occurs, most of the rainfall - along with any traces of these residues - infiltrates the soil and sand, and does not run off into the ocean. The potential for increased concentrations of pollutants in waters along the Silver Strand under the Proposed Action is negligible. Seasonal changes in littoral currents along the Silver Strand may affect the dispersal pattern of pollutants from the Tijuana River or from water treatment plant outfalls.</p> <p>The EIS states that the use numbers for visitors to SSSB are not representative of the actual use of the ocean waters adjoining the beach. In other words, there is no known correlation between the number of visitors and: (a) the number of individuals that enter the water, (b) how far from the beach those water users travel, (c) the time those individuals spend in the water, and (d) the times of day this use occurs.</p>

#	Name or Organization	Comment	Response
330.	James Knox	<p>3.6.2.3.2 of .2, new training activities will increase helicopter use. That's the TRAP. It's N9 on Table 2.2. I must disagree with the conclusion the noise level will not change. Each flight is a separate event with individual consequences regarding sound. Weather, temperature, wind direction and pilot skill all contribute to each event.</p> <p>Suggesting that the helicopters will always be in their assigned flight lanes without data is an assumption. The helicopters get out of their flight lanes many times. I've noticed this, and I think training people -- willing to tell you that. Training evolutions may have variations that are not foreseen. This fact needs to be taken into consideration when making conclusions.</p> <p>More use equals more sound in the adjacent residential areas. Citing the ambient sound of the surf supplies no useful data without knowing the size of the surf, the direction of the swell, the direction of strength of wind and the tidal level. None of this information is contained in the table. Thank you. Skip the other ones. Good. I do have a mitigation area I think -- that I think would be nice, and that is to use the north gate if you have more than three vehicles coming to the south complex. Silver Strand is a small kind of windy-to-the-left street, and you will find that the traffic will back up pretty quickly, and they're going in and coming out. Thanks for this opportunity and the assistance of forthright answers that were given to me to my questions and concerns in the open-house portion of this event. Thank you very much.</p>	<p>The analysis of helicopter sound indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. This results from the logarithmic nature of sound; a doubling of sound energy results in only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p> <p>Navy is responsible for traffic on its controlled land. Once personnel leave the base, they are subject to Department of Transportation regulations. Various speed and traffic control measures would be the responsibility of the City of Imperial Beach. Due to this and similar comments, the Navy is considering implementing increased signage or message board requesting Navy personnel to obey all posted speed limits, keep radios turned down, etc., as personnel leave the base.</p> <p>The reference to the ambient sound of the surf has been deleted from the FEIS.</p>

#	Name or Organization	Comment	Response
331.	Leon Campbell	<p>Thank you. I represent the Airport Trust. It's a private trust. It has the proprietary interest as a licensee under a U.S. patent issued about a year ago, and briefly, it represents a new airport for San Diego. Notwithstanding the fact we spent over 50 years and over \$17 million trying to find an alternate site, this is an alternate site. It is feasible, and it will indeed work.</p> <p>I've also met with the FAA in Washington, and they encouraged us to pursue the concept. And briefly, what it is is an airport that would be located within south San Diego Bay, and it would be analogous to an aircraft carrier. It would have a top level for aircraft operations and a lower level for parking, terminal, facilities, et cetera. It would even have an underwater tube for access to and from the shore. The advantages from an environmental standpoint is that it observes water areas completely around it. It is not invading any habitats. It will not cause any excessive noise. The airplanes will be taking off over and across the bay. It does not interfere with air traffic, military or civilian, and basically we've had a lot of good feelings about what we're trying to do.</p> <p>Tonight, I discovered that the airport, for its location, will be invading, if you will, part of the bay area for amphibious training for the so-called quiet-water training, and that would be the delta areas and the echo area.</p> <p>Now, logically, we should find an alternate site for our airport so we're not interfering with that area. Unfortunately, there is no alternate site. We have the only site in San Diego County that's feasible. So we would respectfully ask that an alternate site be generated for at least part of your in-bay amphibious operations.</p> <p>And I think, somehow, we kind of balance the interest so that that can happen. And otherwise, we are very much in favor of what's being done. We think that there's no environmental complex whatsoever between us. And as an incidental benefit, we'd like to create a second entrance to San Diego Bay so that the amphibious base can go ahead and get their vehicles or vessels out into the ocean and back very easily. The airport does respect the amphibious security zones, so we're not involved there. And we're just down to an old-fashioned tradeoff where we think that the alternate site for the amphibious training in-bay, there is no alternate site for a new airport, which incidentally will be billions of dollars for the economy of the South Bay.</p>	<p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3 of the FEIS. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>Additionally, Chapter 4 of the FEIS addresses the contribution of military training activities to the cumulative impact of all past, present, and reasonably foreseeable future actions. Because this project is still in the conceptual stage, it was not addressed in the cumulative analysis section of the EIS.</p>

#	Name or Organization	Comment	Response
332.	Jeff Foster	<p>I'm a resident of north IB, and so I think that this increase would affect us the most, living up in that area. The increase in activities of shotgun blasts from 150 to 1400, helo sorties from 778 to 2,220, I think. And I guess that, in general, it's a 48 percent increase in sound-generating activities. We definitely will notice that. A lot of them are at night, and it's -- we can hear it. Let's see. I -- so I -- I just implore you to choose the no action alternative. I think that us residents of IB should be considered first and foremost in this decision, because I think we're going to be affected the most. Also, we -- one of the -- one of the most coveted things about IB is the wildlife and the wildlife along the Silver Strand beach adjacent to the south training facility is -- it's really nice down there, and reading this, I can see there's a pretty good impact to that. And I just ask that you choose the no action alternative. Thank you.</p>	<p>The commenter's preference for the No Action Alternative is noted.</p> <p>The increase in shotgun breacher training activities would be as described in the comment. Helicopter sorties would increase from 740 per year to 1,673 per year, although most of the helicopter sorties would be in support of over-water training activities rather than land-based training activities. The projected increase in activities at SSTC-S would not translate into a general 48-percent increase in sound exposure of Imperial Beach residents. While helicopter sorties, shotgun breacher training, and amphibious landing exercises on SSTC-S all would increase, they also would occur in various locations at different points in time. The distribution of these activities over time and space is such that the change in the sound environment for any individual resident cannot be quantified. Community noise levels from cumulative helicopter traffic are addressed in Section 4 of the EIS (Cumulative Impacts).</p>
333.	Normandie Trovato-Wilson	<p>I'm Normandie Trovato-Wilson, and I'm here with San Diego Audubon. Some of the concerns Jim is going to be talking about in a little bit, my personal and biggest concern with the increased level of activities is the introduction of training within the vernal pool areas. These are highly sensitive, complex ecosystems, and I have no doubt about the Navy's commitment after speaking with Delphine last night about protecting the western snowy plovers, the Least Terns -- I'll get into that later.</p> <p>But whereas the Navy can very easily barricade off an area around the western snowy plover nest, it's not quite so easy to determine what the impact is going to be once foot traffic is let into the vernal pool areas, and these are ecosystems of which 90 percent have been destroyed in California. An alternative for the vernal pools, since the complex ecological effects seem to be unstudied and unpredictable, would be to maybe phase in some of the training around a vernal pool that is in poor condition and track what happens in that vernal pool. You may have</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic. While harm to cysts is expected and analyzed, the order of magnitude is expected to be a few cysts, compared to an estimated population of tens of thousands if not millions of cysts in these pools.</p>

#	Name or Organization	Comment	Response
		unexpected results, and it may be better. It could be worse. We don't know.	<p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p>
334.	Normandie Trovato-Wilson	<p>The potential down-listing of the California Least Tern presents a very bad thing in terms of Audubon perspective. We don't really know what the cumulative impact is going to be on both the western snowy plover and the Least Terns. There don't seem to be a real quantification of the sets of numbers. We heard an estimated take number on the high side. We didn't hear one on the low side. There wasn't one in the middle either, and I find that a little concerning. It seems that an option could be to slowly phase in some of these alternatives, such as phasing in the one lane for six months out of the year and seeing how that goes, et cetera. And I didn't see that as part of the plan. And I think that maybe phasing in some of the alternatives and studying the effects could provide the Navy with alternatives to mitigate what may or may not happen.</p>	<p>Modeling was used to estimate mid-range take levels as part of the Biological Assessment on the Proposed Action submitted to the USFWS. It is also expected that a percent of these changes will be implemented over time, rather than all at once. There is no plan to immediately implement the operational changes on the military side. The proposed increases would not occur immediately, and would actually slowly occur over time, similar to the requested phasing. Coupled with the</p>

#	Name or Organization	Comment	Response
		<p>Because as we've known from some of these, many, many, many of these experiments, what happens when we start dealing with these issues is very, very unpredictable. And that's all. Thank you.</p>	<p>Navy's intensive monitoring program, the Navy would be able to continually evaluate the impacts of the Proposed Action on the species.</p> <p>The FEIS explains the level of loss anticipated under the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year for least terns. The difference in incidental take for snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year. The Navy will implement a mitigation measure to schedule training in areas where less nesting occurs, when possible, and still meet training needs. In addition, the Navy will schedule training activities that could be conducted on the hardpack during low tides when it is consistent with training needs. The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy may entail signage affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>The extensive monitoring program that the Navy implements has allowed for adaptive management to ensure avoidance and minimization of take, as well as positive contribution to recovery of both species. Nesting activity has increased despite the average historical annual loss of 38 nests (Figure 3.12-9), indicating a capability of the species to not only continue to persist on SSTC, but also to increase, with training occurring in the nesting beaches during the nesting season. Much of this has to do with the Navy's mitigation measures and management practices. Based upon the available data, training activities at historical and proposed levels appear compatible with persistence of the least tern and western snowy plover at SSTC.</p>

#	Name or Organization	Comment	Response
335.	Richard Barck	<p>Richard Barck, and I guess my description would be local resident. I have a couple of thoughts here. And reading through the report -- a lot to read, a lot of work went into that -- some of the things that I would look at from a statistical standpoint are sound levels, which you always describe as average. I assume that means over a 24-hour period?</p> <p>What we're mostly interested in when we live locally and especially at night is how loud it is for very brief periods. If you dampen it out over a day, yeah, it's not very loud, but it's very loud when it happens. For us, especially if we have any doors open facing west, helicopters go by. You cannot hear the TV. In the middle of the night, if you have a few sorties -- and a sortie, as I understand it, contains more than one helicopter in a formation -- they get very loud. They're only there for a few minutes, but if it wakes you up, you don't go back to sleep immediately. And they happen throughout the night. My impression is that many of those flights can be more offshore, because I believe they're not attacking the shore or part of a mission. That would be a comment on that.</p> <p>We have very quiet nights in this area. At night, we hear the surf. We like to hear the surf. We like to have the doors open to do that. We would not like to have to close them to shut out the noise. The second thing is that sometimes there's an offshore breeze. We hear the traffic on I-5 and the trains across the bay. It's quiet down here. We would like that to be maintained. And basically, I am talking about the impact of your Lanes 11 through 14 or your white and purple. I don't know how you'd like to call them.</p>	<p>Time-averaged sound is not always averaged over 24 hours. As explained in Section 3.6.1.2.3 of the FEIS, the equivalent (time-averaged) sound level can be calculated for any meaningful period, but most typically is used for one-hour, eight-hour, or 24-hour periods.</p> <p>The equivalent sound level is a widely used sound metric because it allows for the integration of numerous sound sources of differing intensity, duration, and quality, and studies have shown that it correlates well with community reaction to sound. As noted in the comment, however, the equivalent sound level does not adequately express the effects of short-term, or impulsive sounds. For that reason, the Acoustic Environment analysis in the EIS also addresses the effects of impulsive sounds, presenting the peak sound level (dBP) of discrete noise sources such as helicopters, landing craft, munitions, and other typical sources of noise associated with Navy training activities.</p> <p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, as well as to and from SSTC-S, occur only over water. The only helicopters overflying residential areas at night are Department of Homeland Security</p>

#	Name or Organization	Comment	Response
			<p>or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment). Community noise levels from cumulative helicopter traffic are addressed in Section 4 of the EIS (Cumulative Impacts).</p>
336.	Richard Barck	<p>Secondly, been a big effort by local people, as well as Fish and Wildlife and the state parks, to further develop the snowy plover -- western snowy plover nesting areas. Some of those in Silver Strand State Beach south are immediately adjacent to all SSTC south. As I looked at the maps, which are very large scale or small scale that you have on there, it actually appears that you've extended into what was part of Silver Strand State Beach for some of those zones. It is an area that we had good fledglings and nests actively occupied by snowy plovers. Department of Fish and Wildlife has the statistics, and I'm sure they will make it available to you.</p>	<p>The Navy acknowledges the contributions of its agency partners to recover the snowy plover. At Silver Strand State Beach, at least five to nine pairs of plovers have nested each year since 2000.</p>

#	Name or Organization	Comment	Response
337.	John Warner	<p>I have two very serious concerns. For the first, I'd like to go back to December of 2008. There was an F18, left the carrier offshore, developed engine problems. He was instructed by commanders to bypass the open runway at North Island Naval Air Station. He was ordered to attempt a landing at Miramar Marine Air Station. We all know the catastrophe that ensued. My point is that we need hyper-efficient communication, coordination and cooperation between the Navy and the Marines. Commander Perry in the paper today stated we need a very realistic training environment. That would be afforded by the vast wide open spaces in Camp Pendleton, not an area sandwiched between two civilian populations and youth camps. Have I cut off?</p> <p>My second major concern, anybody that's been in this area for a while knows that in the waters out here, we have viral. We have chemical. We have bacterial pollutants that contaminate this water for weeks on end. That's -- in an El Nino cycle, that's magnified. Now that's not to mention the potential catastrophe if Rodriguez Dam fails. The structural integrity of Rodriguez Dam is at question. Built in the early '30s, it would not take much of a man-made or natural event. We've been having a little movement on the earth here recently. I guarantee you it wouldn't take much for Rodriguez to pop, the waters out here to be contaminated for months. Now I've been told one SEAL team member, that's about \$200,000 to train that man. That's quite an investment. That's quite a valuable asset. To put that valuable asset in an environment where he is exposed or she is exposed to hepatitis, waterborne pathogens, parasitic amoeba, that is unconscionable. It's negligent. It's reckless.</p> <p>To expand -- yeah, give me the 30.</p> <p>To expand this facility, it may be comfortable and convenient. You may be able to sleep in your beds at night, but I sincerely believe it's compromising the readiness of our troops. Pendleton, that vast area, would provide the opportunity. That's the resource that needs to be explored. Thank you.</p>	<p>San Diego Bay is at the center of a complicated airspace. The Navy has analyzed its flight tracks for safety in the area, as discussed in Section 3.16 of the FEIS. The Navy has determined that risks to the public from rotary-wing aircraft supporting SSTC training are minimal, based on past safety record, low number of flights, and over-water flight paths.</p> <p>The Navy strives to be a good neighbor, and analyzed all training activities at SSTC with respect to applicable federal regulations. The location of training has also been explored through criteria that were established to aid in the determination of the feasibility and eligibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), Camp Pendleton was determined to not be a reasonable alternative location for training. As described in Section 2.1.3 of the FEIS, the Navy considered, but rejected, alternatives that included moving these exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action.</p> <p>With regard to failure of Rodriguez Dam and ocean pollution effects on trainees, effects on Navy personnel are beyond the scope of the EIS (which is intended to address effects on the public and environmental resources).</p>
338.	Jim Peugh	<p>I'm the conservation chair of the San Diego Audubon Society. We appreciate the Navy's long-term work to protect the Least Terns and snowy plovers on the strand. And we understand, you know, the desire to have more training operations, but we think you can do it with considerably less impact to the environment.</p> <p>And we'll mention a little bit -- our letter will try to be more specific, but it is interesting that you're working to increase the training capability where, just a few years ago, the Navy was looking to put a golf course on the same area, also in the city of Coronado, which seems ironic. The Least Terns, you know, some of your data shows that the populations are really high. It is important to notice the complementary number, that the reproduction of -- the successful reproduction has been plummeting for the last few years. So Least Terns are not the least bit, you know, in a good position for the future. The purpose of the Endangered Species Act isn't to let species hang on for decade after decade. It's for recovery, and I hope that you'll orient, you know, your actions and your plan to enable the recovery of the Least Tern, and I don't think that the way it is set up it does now. The project -- I understand that -- that -- figuring out</p>	<p>The Navy appreciates the thoughtful comments about modeling; however, there is as much uncertainty about the projected training tempo and locations, given changes in the world situation. Avoidance and minimization measures are proposed to prevent catastrophic losses to species recovery.</p> <p>The DEIS was amended to explain the level of loss anticipated of the No Action Alternative compared to Alternative 1, estimated to be an increase of seven nests, on average, in a typical year. The difference in incidental take for snowy plover between the No Action Alternative and Alternative 1 is one nest, on average, in a typical year. The Navy will implement a mitigation measure to schedule training in areas where less nesting occurs, when possible, and still meet</p>

#	Name or Organization	Comment	Response
		<p>what the -- the take impact is difficult, but it just seems like you need to have better quantification of what the take is. You run some models, apparently run worst-case models, and that's really misleading to the public and decision-makers when you're only saying this is the worst case when there's something significantly less than that.</p> <p>You really need to say what the uncertainty intervals in the modeling is. You need to come up with a worst case, an expected value and a best case and -- so people at least know what -- you know, how precise your calculations are. And you don't have that.</p> <p>And the same thing is true of your mitigation measures. The mitigation measures are really kind of fuzzy. They're not mitigation in the sense that I've ever seen before in any other project, and I've reviewed hundreds of EISs and EIRs. You need to be able to quantify what the benefit is going to be to the species, and you really need to show how the difference between the impact and the benefit is going to facilitate the recovery of the species, and I don't -- you know, to me, I don't think you've reached that level. And then as Ms. Wilson mentioned, the services working on -- for some strange reason is working on down-listing the Least Tern, which seems to be the most inappropriate action I've ever heard of. But you need to look to see what the cumulative impact of down-listing will be with your project.</p>	<p>training needs. In addition, the Navy will schedule training activities that could be conducted on the hardpack portion of the beach during low tides when it is consistent with training needs. The Navy will develop a marking strategy to delineate least tern and snowy plover nesting areas that does not encumber training activities. Such a marking strategy may entail signage affixed to existing beach lane sign posts and a limited number of additional markers, as determined appropriate by Navy staff.</p> <p>Finally, The Navy's Proposed Action includes: ongoing nesting site preparation at the Delta Beaches; predator management; population monitoring; a Long Term Habitat Enhancement Plan; and measures to eliminate unauthorized recreational trespass, which are all conservation measures that support the recovery of the least tern. The Navy expects that implementation of these conservation measures will maintain the suitability of least tern habitat within the action area over the long term. The Navy's actions will increase the capacity of oceanside beaches and the Delta beaches to accommodate least terns and snowy plovers.</p>
339.	Jim Peugh	<p>We're really concerned also with the vernal pools. I don't know if you ever had to do trail maintenance, but trails are an increasingly degrading thing. They just go deeper and deeper the more years it's used. I don't know what's going to happen to the contours of vernal pools, but I think that you need to take up a pool, as Ms. Wilson said, and do a lot of experiment over a lot of years before you actually start manipulating.</p> <p>That's the most endangered habitat type in our entire region. And so I just hope that you'll work hard -- and another thing, too, is that the staff so far in their command has been very serious about the environment. But people change, and I want this project to be so they really will protect the environment, not just depending on the personality of who's in charge.</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic, covering a total of about 3.2 acres. While harm to cysts is expected and analyzed, the order of magnitude is expected to be a few cysts, compared to an estimated population of tens of thousands if not millions of cysts in these pools.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation</p>

#	Name or Organization	Comment	Response
			<p>with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The Proposed Action will not all occur immediately, but will slowly scale up over time, and only after the baseline condition of the vernal pools has been established, and Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This gradual process will allow the Navy to evaluate the potential impacts, and take corrective action as necessary.</p> <p>The Navy has established programs to address turn-over in personnel. Any new proposals that may affect listed species would need to be consulted on separately with the USFWS.</p>

#	Name or Organization	Comment	Response
340.	Rina Kelley	<p>I'm not a snowy plover or a fairy shrimp. However, I am an inhabitant. I don't feel also that you have mitigated enough sufficiently for me, being north of Imperial Beach, your mitigation of what you intend to do.</p> <p>I would like to inform you at this time about your lack of attention and the dangerous disregard of your property in Imperial Beach that has put the inhabitants of my city into a dangerous, threatening activity -- subject -- being subjected to your dangerous, threatening activity for years.</p> <p>I would like to put you on notice first that your steel wall outside the Camp Surf fence at the beach has huge holes, serves no purpose except to attract children, has become a serious hazard to the safety of us. Jagged, rusted steel rim and bottom are hazardous on a daily basis. It is an accident waiting to happen for children.</p> <p>Anyway, okay. It's a hazard, anyway. And it's -- for about ten years, it's been a hazard there with holes jagged. So would you have us wait another ten years to remediate and remove it? Hopefully not, that you are now formally put on legal notice with legal effect.</p> <p>Camp Surf -- Camp Surf opened onto the street in a residential area for years. You did nothing about it. It ran over the animals on our street, one animal in particular. I called the Navy Chaplin, and the people were distraught. And hit a child in front of my home. It was not -- you did nothing. We are the ones that had to make that camp in the same manner that I just served you with a notice to move that gate to the other end.</p> <p>I want to tell you that this EIS in and of itself is like the nose's camel -- the camel's nose in the tent's door. On SSTC northeast, you do a little bit more -- you could request more activity, permission for an EIS. Then you do it at NASNI. Then you do it in the south where the Navy SEALs are. It's an aggregate effect. The aggregate effect is that, gentlemen, we live in a war zone. I live in a war zone in the summer where Navy SEALs shoot guns and explode munitions outside all night. I can't sleep. Could you please put a time limit on this activity.</p> <p>Your EIS specifically addresses the intensity, the intervals and another thing -- the intervals, the intensity of the activity.</p> <p>We'd like to know the intervals. I'd like to have a -- you know, a timetable so that I can leave town. Also, in addition, the planes that NASNI fly overhead doing these endless, mindlessly seeming exercises -- I was an Air Force officer. I was on Air Force bases. I don't understand how the Navy can destroy a city like this.</p> <p>You shouldn't even be here. This is property that is coveted south shore property in the south -- Southern California, and, you know, I really hope that you could provide us with some timetables at least in mitigation of this. And, you know, go to the Philippines. General MacArthur took care of the Japanese. You don't have to worry about them over there, unless you drive a Toyota</p>	<p>Regarding Camp Surf: issues about Camp Surf are outside of the scope of the EIS, which addresses the Proposed Action. Camp Surf is an area leased by the YMCA from the Navy. Any safety issues regarding the Camp should be brought by the YMCA (the lessee) to the Navy (the lessor). Thank you for alerting Navy to your concern about condition of Camp Surf fence. NBC Planning has prepared a 1391, dated 28 May 2009, for FY 2010 Special Projects Program for repair seawall near Camp Surf.</p> <p>With regard to suggestion for timetable, the Navy does not train during a particular time of year or season. As stated in Chapter 1 of the EIS; SSTC is a critical Navy range for west coast naval amphibious, special warfare, and mine countermeasure training activities, and has been used by the Navy for military training for over 60 years.</p>

#	Name or Organization	Comment	Response
341.	Ed Sorrels	<p>I can tell already I'm not going to be a happy speaker for you folks. The captain mentioned -- oh, my name is Ed Sorrels. I'm a Marine veteran. I've lived in Imperial Beach almost 40 years, two different places, one over on Hemlock next to the auxiliary landing field, and now I live on the north side of Imperial Beach. I've heard floating airports. I've heard "I can't sleep at night." I've heard birds and vernal pools and one thing and another. The one thing I haven't heard addressed was, the captain, when he gave his introduction, talked about the importance of realistic training and surviving a combat situation. And there's nobody here yet in this whole group that has addressed the improvement of training, proportioned it to the survival abilities of a marine or a sailor in combat situations.</p> <p>Now, I'm sorry you can't sleep at night. Neither can I. But damn it, that's the sound of freedom. And to -- I'm for option one. There's a sign down here at MCRD over the door of the drill instructor's training facility, and what that sign says is "Let no man's ghost say to me 'If only you had done your job,'" and that applies to all of us now. And that's all I have to say.</p>	<p>As expressed in Chapter 1 of the EIS; the Navy needs to implement its Proposed Action to provide a training environment, with the capacity and capabilities to fully support required training tasks for operational units and military schools—to achieve and maintain the required levels of operational readiness as mandated by Title 10 of the United States Code (USC) 5062. Title 10 requires the Navy to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas</p>
342.	Van Collinworth	<p>I'm the conservation -- actually vernal pool conservation director for a coalition of environmental groups. Those include the San Diego Chapter of Sierra Club, the San Diego Audubon Society, Center for Biological Diversity, the California Chaparral Institute, and I'm most known if it involves Santee. I actually live out in Santee. The issue I wanted to most focus on is the vernal pool impacts. And, first, let me say I appreciate the fact you've already acknowledged there's not going to be any activity during the wet seasons. But I am still concerned that the impacts -- the foot traffic during the dry periods would result in mortality of endangered -- the endangered San Diego fairy shrimp.</p> <p>So the best, I guess, opportunity or best route is actually to avoid those vernal pools possibly with some fencing or signage to identify the resource and so there aren't any impacts there whatsoever.</p> <p>Now, the previous speaker made an excellent point about readiness and the importance of training, and we certainly appreciate that. And so if you were to find in your analysis that there couldn't be avoided -- even though we still feel that that foot traffic will create a significant impact, we'd like to see that mitigated elsewhere. Now one of the things I have with me tonight is a map of vernal pools actually that are directly adjacent to Marine Corps Air Station Miramar on Fanuita Ranch. That property is for sale. It has a wealth of vernal pool resources. It's a perfect candidate for the readiness and environmental protection initiative that the military has the buffer program. So I would like to see that given some serious consideration in this EIS and see if that might actually meet the needs for mitigation.</p> <p>Thank you very much. And if I could leave the map?</p>	<p>Foot traffic entering the pool, as described in the EIS, does not mean troops of people walking back and forth over the pools. The nature of these training activities is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic, covering a total of 3.2 acres. The Navy will use scheduling and other planning tools to minimize avoid impacts to vernal pools, as listed in the FEIS (Section 3.12 and Section 5) and the signed Biological Opinion (July 7, 2010). This Biological Opinion concluded that, with mitigation measures in place, training activities associated with the Proposed Action would not jeopardize the continued existence of the San Diego Fairy Shrimp.</p> <p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7, marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. The Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will identify measures to minimize the potential for adverse effects to fairy shrimp from weed abatement, pool restoration, or pool augmentation. The Navy will be establishing the baseline distribution and abundance of San Diego fairy shrimp and the condition of the vernal pool habitat prior to initiating training</p>

#	Name or Organization	Comment	Response
			<p>activities in or around the vernal pools at SSTC-S Inland. The Navy will report monitoring results and any observed incidental take to the USFWS annually, and will adjust management to the vernal pools occupied by San Diego fairy shrimp to minimize any training impacts detected by monitoring. If impacts are more substantial than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The Proposed Action will not all occur immediately, but will slowly scale up over time, and only after the baseline condition of the vernal pools has been established, and Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This gradual process will allow us to evaluate the potential impacts, and take corrective action as necessary.</p>
343.	R.G. Head	<p>I'm a resident of Coronado Cays. I've spent a lot of time in Imperial Beach. I have a Bachelor of Science degree in engineering and a Ph.D. in public policy. For the past 20 years, I've worked in the environmental planning industry, and now I'm a private citizen. I've observed tonight's comments are mostly negative with the exception of Ed Sorrels', and I would like to add a few to provide some balance. First of all, naval training is critical. It's absolutely critical to our survival as a country just like it is for the Olympics. In fact, the phases are very similar. Basic training is physical conditioning just like for a ski jumper. Pre-deployment training for combat is indispensable to train young men and women before they go to Iraq and Afghanistan. And thirdly, training between deployments is very important to get new technology, new ideas constantly improved communications. Secondly, training area environmental impact statements are very unique. Training areas, you can't move the area. The area is where it is. I think the 60-year experience of the Navy in this area states for itself that if the training could have been moved to Miramar or to Camp Pendleton, it would have been done so long ago.</p> <p>I'll say something about the ease of which you throw off "use Camp Pendleton." Camp Pendleton's 17 miles of beach are so critically inhabited by endangered species that less than five miles are available for continuous Marine Corps training. They're not going to walk them another 5,000 operations up there. There is no better place for this type of training in the bay and in the ocean than this location.</p> <p>Thirdly, the constraints that are put upon the Navy and the Marine Corps in their training are already immense. Yes, there are environmental issues. Yes, there's public concern over noise and economic impact. But most of the -- some of the speakers that you have seen are single-</p>	Your comment has been noted.

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		<p>issue advocates. They're worried about a vernal pool, or they're worried about the snowy plover. The Navy does not have the luxury to be a single-issue advocate. It is like the rest of us. We are multi-faceted. We have to deal with all the issues at the same time and make tradeoffs. As the Supreme Court -- as the United States Supreme Court ruled in 2008 in "NRDC versus the U.S. Navy," we and the citizens must give adequate attention to the common defense, and that's what I see done in this EIS.</p> <p>Training and environmental stewardship are compatible, and I believe the Navy has achieved a good balance in this set of analysis. Thank you very much.</p>	

#	Name or Organization	Comment	Response
344.	Cindy Buxton	<p>Some of you know me from Mountains and Waterfalls. I've made some observations for stuff. I cannot know all of your point of view. I think that's obvious, so thank you very much for the Navy keeping the good communication over the years. And with all due respect, and I most definitely do, I'm going to make a few observations from my point of view since I have a hard time seeing all of yours. The training has already been very, very effective, and I think we're all very grateful since World War II and Vietnam and Korea and Desert Storm. So I look at the two miles up there as I drive to work every day, and I look at the half mile of particularly critical areas down here, and I go "Why do we really need this?" I don't -- I haven't yet really seen the compelling argument to do some of the things that they want to do. And they talk about the criticality of training and the unique area that -- that area up in Coronado seems to me to be very similar as a beach to this one, the one difference being is that this beach has natural dunes, and it's one of the few places in Southern California where you have a long wide swept area of natural dunes.</p> <p>I moved down here, believe it or not, to Silver Strand and to Imperial Beach specifically because that was such a gorgeous, gorgeous beach. And I certainly do think that we should share our beach where we can or they with us, as you guys are Navy.</p> <p>This town has worked very hard, I've noticed. I thought it was pretty wonderful anyway, though they've worked very, very hard to improve it and improve property values, and I think a lot of heavy artillery will probably compromise that considerably.</p> <p>The one thing I noticed in the EIS was that the camp, Camp Surf, apparently hosts 10,000 children in a year, and I don't think when they originally leased that that they were thinking of a lot of blasting. So what I saw in there was that the Navy holds that property in a fee simple, and I looked this up and noticed that fee simple can be fee differential or circumstantial subsequent, and I'm wondering if there are any extra contingencies on that. The blasting does affect people and children. This is where my dog went through a window one night when she got scared, and I think children would, too. So I would ask you to consider that and modify and attenuate for the birds and the blasting in this area. Thank you.</p>	<p>The Navy must remain committed to training for the safety and security of our country. To do that, the Navy's highest priority is in the protection of our men and women overseas performing their job in defense of our nation. The mission of the SSTC ... "to achieve and maintain the highest level of operational readiness" is discussed in Section 1.4.1 of the EIS and Section 1.5 of the EIS highlights the purpose of and need for training at SSTC. There are many reasons why the Navy needs the SSTC land and nearshore areas to train and why other locations do not fill the need. These alternate locations and training tempos are discussed in Section 2.1.3.</p> <p>As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3 of the FEIS. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p> <p>Regarding Camp Surf and SSTC-S, there is no "blasting" at or near Camp Surf and there is no "artillery" use at SSTC. Section 3.12.2.2.4 and Section 3.12.2.3.4 of the FEIS discuss simunition and blank usage at SSTC. The use of live fire is not permitted at SSTC. The simunition and blank usage takes place mostly within SSTC-S bunkers therefore, noise from these activities is considered negligible.</p>

#	Name or Organization	Comment	Response
345.	Shannon Davis	What's on my mind is the fact this is an environmental impact statement. It's a draft. And we're focusing on the environmental issues and NEPA compliance. This is not about patriotism. This is not about being -- protecting our freedom. This is about saving endangered species on critical habitat that maybe apparently should have been paid more attention to by U.S. Fish and Wildlife. And possibly some of these areas should have been sanctioned as refuge, study areas by U.S. Fish and Wildlife to be held under their jurisdiction, not in cooperation with the U.S. Navy.	With implementation of the Proposed Action, losses in California least terns and western snowy plover nesting are expected to be minimally increased from baseline levels. The Navy and U.S. Fish and Wildlife Service (USFWS) have established mitigation measures to compensate for these losses. The Navy has consulted with the USFWS under Section 7 of ESA for the Proposed Action, and received a Biological Opinion (signed July 7, 2010), which concluded that proposed training activities would not jeopardize the continued existence of ESA-listed species.

#	Name or Organization	Comment	Response
346.	Edward Feltis	<p>I'm a resident of Imperial Beach. I've been coming down here since 1960 walking the strand, and this is a single -- single-case issue. I'm not sure exactly how you put it, but single-person issue.</p> <p>Upon reading the impact statement, I noticed that the tide flats are public, and I'm a pretty regular walker. My wife takes me down to Silver Strand. I walk up to the IB pier. I have no problems with -- and according to the statement, most of the training that's going to take place will take place for an hour or two hours, eight hours at the most, things will be posted. I have no problem with walking the beach, running up to a sign that says "Restricted area for the next 48 hours. We're going to be doing this. We're going to be doing that," turn around, walk right back to IB. But my concern is that in 11 through 14, we'll get a sign put up like we had put up two years ago that said "Nobody past this point. This is naval property. You can't walk down to the Silver Strand," and what everybody did was ignore it. If they didn't see anything going on, they ignored it.</p> <p>Readiness training, all part of that. I've got two kids that work -- or live down the hall from me that are in SEAL Team 3, and I want those guys ready, professional and able to do their job whatever it takes. I just want a little assurance that -- on those days when nothing's going on, I want to walk the Silver Strand between the state park and here -- I won't be in any kind of jeopardy or I won't be in the way of any activities. Thank you very much.</p>	<p>As indicated in Section 3.1 of the EIS, restriction of SSTC-S beach areas above the high tide line will continue. Access below the high-tide line would only be restricted during some training activities for either safety or mission security reasons.</p> <p>Signs will be revised to clarify that restrictions are only above the high tide line. Personnel will be stationed on either side of training activities to notify recreationists when areas below the high tide line need to be restricted for public safety or security reasons.</p> <p>As listed in NBCINST 3502-1, the Navy does notify local public safety agencies and city governments about specific upcoming hazardous or high-visibility night training events so that the local governments may disseminate the information to their communities. Because of this and similar comments, the Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.</p>

#	Name or Organization	Comment	Response
347.	Ed Sorrels	<p>Okay. Summer of 1957, I was flown in from Hawaii to Camp Pendleton, and I worked all that summer as a lifeguard on the beaches there by Del Mar where they do the Amtrak and rubber boat training for the Marines. And I can assure you of one thing: The environment here on the strand is entirely different than the beach approach environment in Camp Pendleton. You go from water to a very small beach, and then you start inland, and it goes uphill. You don't go from water to beach to water. And it is -- to compare the Silver Strand to Camp Pendleton training areas is apples and oranges. The two don't compare at all.</p>	Your comment has been noted.
<b>CORONADO, CALIFORNIA</b>			
348.	Bill Adams	<p>I'm primarily interested in -- I'm a shore fisherman. I've been shore fishing Coronado beaches since 1949. As a matter of fact, when I was ten years old -- my dad was in the Marine Corps -- I was fishing off the Coronado jetty in front of the hotel in 1943 at age ten. So I know a little bit about shore fishing.</p> <p>Now I'm particularly interested in your Section 3.8, quote, fish. And I'm going to be talking mostly about what we shore fisherman use as bait. Those are called, especially in the summertime, sand crabs. That's the backbone of shore fishing in this area here. On your section references, you talk about -- you have 75 references on 15 -- 15 pages, I think it is.</p> <p>I wrote reports for the Navy for over 30 years. So I was a little surprised when I opened up this document -- a young man earlier explained to me why you're not doing it, but usually when you have a reference, you would have -- if I went to the reference section, it would say in the report what page this came from, or pages. All right. That's not done.</p> <p>It's almost impossible to go through that report and find out where you're talking about. For example, you've got one report dated 1892, some author who wrote something in 1892. I'd like to know what was so important that was required to be in the reference -- 75 references.</p> <p>The other thing that many of us shore fishermen are concerned about, and both the lifeguards in Coronado are well aware of the situation, especially shore fishermen, and that is wheeled vehicles on the beaches. Okay? Now, years ago, when I was on the city council in Coronado, we managed to talk the Navy into getting off the wet part of the sand. That's where the sand crabs are at.</p> <p>But I noticed just recently they're still driving those vehicles on the wet sand, especially at low tide. That's almost a no-no. You're killing the sand crabs. Now, you say there's no long-term effect. Well, I can tell you, as a fisherman, there is. There are no sand crabs on Coronado beach right now. If I go down to Silver Strand, there are sand crabs. If I go down to Imperial Beach by the pier, there are sand crabs.</p> <p>Oh, my God. I guess I'm going to be cut off real short here. Amazing. I don't see how you can have a real impact on a discussion when you only have three minutes. I mean, that's ridiculous. And then tell us, "Oh, by the way, we've got a thick document here," and you want us to respond by March 9th. That is ridiculous, too. And there's only one copy of that report in the Coronado</p>	<p>The reference that you refer to is "Eigenmann, C.M. 1892. The fishes of San Diego, California." This is a reference that speaks towards the long term documentation of fish species that occur in the SSTC area, and is an important baseline for comparison. Considering the sand crab (<i>Emerita analoga</i>) has a long planktonic larval phase that implies a high dispersal potential, and coastal water transport is an important factor in determining its local and latitudinal distribution. Extended larval duration allows individuals to colonize new areas with suitable habitats, and is a mechanism to annually restock already existing populations (Tam et al., 1996). Factors such as regional oceanographic dynamics, variations in long shore transport, and local circulation patterns that determine sediment grain size and food supply (they are filter feeders) are what is likely regulating sand crab populations along SSTC beaches.</p> <p>The Navy appreciates the public involvement in the NEPA process. In response to requests by the cities of Imperial Beach and Coronado and citizens, the public and agency comment period for the FEIS was extended to March 30th.</p>

#	Name or Organization	Comment	Response
		<p>library. Yeah. Well, I've said my peace.</p>	
349.	Jennifer Blair	<p>My question -- I noticed in the agencies that the California Environmental Quality Act really was not addressed in there, and my specific question is related to noise, and the helicopter noise is the main problem that I'm seeing. I live in the Cays, and I understand we're not talking about the helicopters that are going from -- transporting from Miramar and down to the south end in IB, but you're considering -- I forgot how many sorties that you want to have in addition of the helicopters, and how is that addressing the environmental noise act? That's just a question I have.</p>	<p>The Navy, as the federal action proponent, examines environmental impacts to resources under NEPA. CEQA would not apply, it is only required by a California State public agency when making discretionary decisions.</p> <p>With regard to the environmental noise act referenced in the comment, USEPA has authority under the federal Noise Control Act to establish low-noise design standards for commercial aircraft. However, military aircraft are exempted from this federal statute.</p> <p>As proposed for Alternatives 1 and 2, up to 1,643 helicopters may be involved with SSTC training events. Approximately 150-200 helicopters per year would fly into SSTC-S inland under Alternatives 1 and 2. The remaining 1,450 to 1,500 helicopter operations would occur offshore in the boat lanes or bay training areas. The most substantial increase in helicopter operations from baseline to Alternatives 1 and 2 would occur with the 386 new MH-60 mine hunting operations, in the western portions of boat lanes.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopter overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment).</p>

#	Name or Organization	Comment	Response
350.	Beverly Dyer	<p>I think it's ludicrous that the Navy has suddenly thrown this upon our public. I want to know how long they have been studying this, why we haven't heard about it before. I know they've been saying they're going to get all this money, and they can do all these things, but did they ever tell any of us that they were going down the strand? None. I have never seen it released until last night, and I didn't have time to write up all of my questions that I have, all the comments that I have.</p> <p>But I have been jotting down different things as you've gone along. But it just doesn't seem right that suddenly we know -- we read about it in the paper, and a lot of people didn't see it in the paper, and there has been very, very little about it on the television. Now that isn't fair. It isn't fair for the Navy to suddenly come in to say "We're doing all these things, and we've done all these things and we've looked up all the environmental necessities and for the project."</p> <p>But why haven't we known? Why haven't they told us if we live here? I live in the Cays. I've lived there 40 years, and I've watched things. I haven't seen any kind of action in that area. In fact, at one time they were going to build a golf course up where you now have buildings on the hill. We used to walk there. There wasn't anything going on there. So -- and suddenly, you've done all these things. You're going to take it over, and there has been very little going on even north of the -- of Silver Strand park where people park right up -- up to the Navy property. But I haven't seen actions going on that far down, and perhaps I missed a few, but I doubt it, because I drive there all the time. And that's another thing that you did not bring up, and that is traffic. The traffic has gotten absolutely horrible because of the Navy, because of North Island. They've been working on that tunnel for North Island, and that's ridiculous because we have -- already have all this traffic coming up from the -- the helicopter base down in Imperial Beach, coming up the strand. They're just continual already.</p> <p>Now you want to do all these other things. You want to save the Navy from having to go far away from their homes. Well, what about the people that live here, that have -- live in Imperial Beach or live in the Cays or live in Coronado? You just add that much more to the people that are here. Even though you keep your people from driving, there are other people that live here, too, and the people that work for the Navy.</p> <p>Thank you. I'm going to also include a letter, so -- later on. Also -- and I agree with the noise and the pollution, you have -- nothing has been said about the pollution in the air that we breathe from the planes going over anything that's on the beach that we get from any of their -- their vehicles and any of the pollution that's in the water. They have the Silver Strand beach there where public comes in and uses up all summer, even in the wintertime, and they use that beach as do the surfers.</p>	<p>Regarding the current activities at SSTC; the southern nearshore areas of NASNI are very large areas, much of them out of the sight of the public. It's very likely that most training activities currently being conducted would not be noticed.</p> <p>The Navy is very interested in the contribution of the public to the SSTC EIS. The Navy scoping began at the inception of the SSTC NEPA process in 2001 to open communication with surrounding neighborhoods. The public hearing dates on the Draft EIS were published in local papers, and the Navy requested comments on the document with an extended period for comment on the document. The Navy has remained in contact with the public through the SSTC website as well: <a href="http://www.silverstrandtrainingcomplexeis.com">www.silverstrandtrainingcomplexeis.com</a></p> <p>As described in Section 2.1.3 of the EIS, the Navy considered, but rejected, alternatives that included moving these exercises to other locations. Such alternatives fail to meet the purpose of and need for the Proposed Action.</p> <p>The Navy is aware of the diverse biological community in the area, and has conducted a thorough analysis of potential effects in Chapter 3 of the Draft EIS. The Navy does not dump toxic pollutants into marine areas. Please see Chapter 3 of the FEIS for the description and analysis of potential effects. Chapter 4 includes cumulative analysis of all past, present, and reasonably foreseen future projects by the Navy and non-Navy activities. The Navy has a comprehensive air quality management program. Mitigation measures that are part of the Navy's air quality management practices are implemented at SSTC. Aircraft, marine vessels, ground vehicles, and military equipment are well-maintained, and meet applicable emission standards (such as smog certification for on-road vehicles) in accordance with State requirements.</p> <p>The Tunnel Study is known as "State Route 75/282 Transportation Corridor Study" which includes a tunnel</p>

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			<p>alternative. This study is funded by the City of Coronado. Under Federal transportation authority, Caltrans District 11 has assumed the role of federal Lead Agency for the Draft Environmental Impact Statement (Draft EIS) being developed for the State Route 75/282 Transportation Corridor Study/Project. This local transportation proposal is “owned” by CalTrans and the City of Coronado. The Navy is not the action proponent for the proposal and is participating solely as a Cooperating Agency under the National Environmental Policy Act (NEPA), supplying special expertise on the Draft EIS on federal land use issues affecting NASNI. The scope of this study does not include the portion of State Route 75 south of Naval Amphibious Base.</p> <p>A related issue is the implementation of the DoN’s Record of Decision (RoD) for the USS VINSON CVN Homeporting Final Supplemental Environmental Impact Statement (Final SEIS). The cumulative Navy traffic impacts studied in this Final SEIS are the same traffic impacts of concern in the State Route 75/282 Transportation Corridor Project Draft EIS as commuters travel on and off NASNI during peak hours each weekday. The RoD proposes to work cooperatively with Caltrans and the City of Coronado. Once a local government agrees to use its jurisdictional authority to take the studied improvements forward, the RoD commits to seek federal funding to implement a series of traffic improvements. These recommended traffic improvements are a suite of local intersection upgrades with the City of Coronado, "Village".</p>

#	Name or Organization	Comment	Response
351.	Normandie Trovato-Wilson	<p>I'm with the San Diego Audubon. I want to thank Captain Lindsey and Delphine and Lewis for hosting again tonight. I have just a few things that didn't come up last night.</p> <p>The first thing was we know that there is anticipated projection in -- an increase in levels of recruitment, and we completely understand that with the level of new recruits that are needed to maintain the fleet readiness. However, if levels drop in the future, we would be interested in including a provision that indicates if for some reason there is complete peace everywhere on earth, for instance, and training levels dropped dramatically, that certain training lanes which are not currently used, if they are used in this future Alternative 1, that they might be phased back.</p> <p>It was brought up last night about peak noise events and how peak noise events might be a helpful statistic to include in the second draft of the EIS as opposed to average noise levels, because if we're talking about peak noise, we can have one really loud peak noise, and then the rest of the day could be quiet, and that would be an average noise level, but that wouldn't analyze the data of the peak noise and how loud it would be.</p>	<p>The increase in training activities is not the only driver for the Navy's proposed training, but also the changes in types of training and platforms, as well as a need for diversity in training. If there is a decrease in training, many of the conditions will tend towards current use because of the natural tendency of training towards training lanes 1-7 and 11-14 (vs. 8-10) as well as a natural tendency towards the northern developed area of SSTC-S (vs. the undeveloped southern areas of SSTC-S).</p> <p>Both time-averaged sound levels and peak sound levels are addressed in Section 3.6 of the EIS (Acoustic Environment). For each type of noise event, the appropriate noise metric is used.</p>
352.	Normandie Trovato-Wilson	<p>The other thing that I want to repeat from last night is that the California Least Tern is currently in limbo of being down-listed by the U.S. Fish and Wildlife Service, and that would have a big effect on what would be going on at the SSTC. And just as a side, recovery efforts are often unpredictable and hard to predict what's going on. And there is a commitment, clear commitment by the Navy to maintain the environmental integrity of the SSTC.</p> <p>And it's my personal opinion, not necessarily Audubon's, that maybe some phasing in could be added into the -- the use -- the plans, so maybe trying something, if you see a negative impact, phasing it out. I don't know exactly what the protocol is for that. And it is our hope, from Audubon, that these steps are not towards general reduced protection of wildlife in general, but maintaining of the Navy's commitment to the environmental integrity of the SSTC.</p>	<p>Implementation of increased training tempo and additions of new activities is expected to be phased. The level of protection provided by the Navy is the same for a species listed as Threatened, as opposed to Endangered. Navy programming for natural resources conservation on the Silver Strand will continue.</p>
353.	Gary Trump	<p>Are you going to have an independent study to corroborate what your positions are? Because I think without that, nobody's going to believe you, at least the skeptics won't.</p> <p>The other thing is, we live at the very bottom of the Cays. There's a lot of unburnt fuel from the helicopter passages. There is a lot, and it's all over the patio furniture. It's not thick, but it's there. And if you increase your level of helicopter flights, you're going to increase that, too.</p>	<p>Many of the Navy's actions require regulatory permits from other governmental agencies. As part of the permitting process these agencies conduct independent reviews of the Navy's actions.</p> <p>In addition, the Navy has outreached to other organizations throughout the public comment period (e.g., CalTrans and environmental NGOs) to get their feedback on the Navy's assessment.</p> <p>The Navy has a comprehensive air quality management program. Mitigation measures that are part of the Navy's air quality management practices are implemented at SSTC.</p>

#	Name or Organization	Comment	Response
			<p>Aircraft, marine vessels, ground vehicles, and military equipment are well-maintained, and meet applicable emission standards (such as smog certification for on-road vehicles) in accordance with state requirements.</p>
354.	Gary Trump	<p>The other thing is we sit out on the patio quite a bit, and there are times, with your helicopter noise, that we have to stop talking. And I'm quite sure that you don't really want to have that happen in this environment. It's a lovely environment.</p> <p>We came from Los Angeles, and we've never known you people before. We live in the Cays, and there are a lot of people in the Navy there. We love you very much. We're worried about you, and yet I think there are some things about your proposition which probably is not -- I don't think withstand a peer review. So maybe you can think about that.</p>	<p>The typical flight pattern in support of SSTC-S inland training consists of an approach along the San Diego Bay flight corridor, turning west on the southern side on Emory Cove, and beginning a descent into SSTC-S, targeting the drop zone to the west of Bunker 99 on the northern end of SSTC-S. Once established in this approach, the helicopters remain at 500 feet over residential neighborhoods and do not reduce their elevation to 150 feet until they are over SSTC-S. On departure, the helicopters ascend to the west over the Pacific Ocean.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopter overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment).</p>

#	Name or Organization	Comment	Response
355.	Marilyn Field	<p>I'm a Coronado resident, and I'm very concerned about this project. I'm very concerned about the noise impacts and the pollution impacts. The newspaper said there was going to be live fire. I was told tonight there wasn't, but I think it would be good if we understood exactly what was going on.</p>	<p>Chapter 2 of the FEIS describes the components of the activities. The Tables and text in Chapter 2 describe all risks and potential impacts of the activities. No live fire is performed at SSTC. Activities consist of piloting vessels, amphibious vessels, helicopter activities, underwater detonation/mine neutralization activities, BUDs/SEAL training, and physical conditioning training. Activities involving the firing of blanks and pyrotechnics are mostly conducted within SSTC-S.</p>
356.	Marilyn Field	<p>As far as the noise impact, it simply defies credibility that there's going to be no significant increase in noise. It may -- you can do all kinds of things with statistics. You can average it out over a long period, and somebody said you could play all kinds of games with it, but it's simply not credible that this is not going to add to noise in Coronado.</p> <p>This is a small residential community, and you just cannot keep using this as though this is your only training facility. You have other places where people can train. And, yes, it's more convenient here, but you have to balance that against the needs of the small community, and you are very definitely going to be impacting the quality of life here.</p> <p>Already, we have serious impacts of helicopter noise. We live on the other side. We live on the San Diego Bay side, and yet we are constantly, in the summers particularly, affected by helicopter noise so that we can't watch the evening news. We can't have telephone conversations. We can't conduct conversations around the dinner table because the helicopters will come in fleets going south or north on the bay. And they're supposed to stay offshore, but they don't.</p>	<p>Helicopter noise is addressed in Sections 3.6.2.2.1 and 3.6.2.3.2 of the FEIS. The analysis of helicopter sound indicates that, while the number of helicopter sorties would increase substantially under Alternatives 1 and 2, the increased frequency of short-term sound exposures from increased helicopter pass-bys would not be sufficient to noticeably change the hourly average sound level at any one off-installation location. This results from the logarithmic nature of sound; a doubling of sound energy results in only a three-decibel increase, which under typical conditions is barely discernable. The analysis of helicopter sound is based upon broadly defined flight paths, consistent with a normal degree of variability introduced by pilot discretion, weather, time of day, and safety concerns such as other aircraft.</p> <p>As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopter overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment).</p>

#	Name or Organization	Comment	Response
357.	Marilyn Field	<p>Now, I'm told that this project did not analyze the helicopters going to and from the training areas. Now that seems to me it's probably a violation of NEPA. Under the National Environmental Policy Act, you're supposed to consider all of the environmental impacts, whether they're remote or anything that's affected by this project.</p> <p>You said you've been working on this since 2001, and yet you've chosen to analyze the helicopter traffic patterns and noise to and from the training area separately. Now that's called segmentation. It's illegal under NEPA. You're supposed to analyze the whole thing, and the public is supposed to have an opportunity to understand and comment on the total effects of the project, not chopped up into little pieces so that it looks benign, but the entire impact of the project. That needs to be done before you proceed here.</p> <p>Secondly, I think the gentleman who just spoke made an excellent idea. I think we do need some independent analysis of your conclusions, because they're simply not credible. And I think it's important to consider the quality of life here and the human element, as well as the wildlife. So I'd like you to think about what you're doing to Coronado. It's not just about the Navy. This is a small community, and we really need to be very aware that you cannot simply continue to load Navy operations here without ruining this small town.</p>	<p>Helicopter noise from the activities of the Proposed Action is addressed in Sections 3.6.2.2.1 and 3.6.2.3.2 of the FEIS. As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Nighttime helicopter transits from NOLF and NASNI, and to and from SSTC-S, occur only over water. The only helicopter overflying residential areas at night are Department of Homeland Security or U.S. Coast Guard. Information on these flight patterns, as well as the percentage of sorties associated with training at SSTC, has been added to the SSTC EIS document in Sections 2 and 3.6 (Acoustic Environment). Community noise levels from cumulative helicopter traffic are addressed in Section 4 of the EIS (Cumulative Impacts).</p> <p>Many of the Navy's actions require regulatory permits from other governmental agencies. As part of the permitting process these agencies conduct independent reviews of the Navy's actions.</p>
358.	Steve Cohan	<p>I just wanted to make sort of a summary statement about my impression of the project. People have talked and brought up some very good points. The impression is that there's going to be a really significant change of impact on the beach. The fact that this process was started in 2001, that now you're -- it was ten years ago and you're now having public hearings, I think that the presentation has tended to minimize what the likelihood is of the impact that it's going to be significant.</p> <p>The people have mentioned these really important areas that really haven't been fully addressed, the impact on wildlife, the noise impact, the possibility of future cutbacks of these operations, legal compliance with preparation of the report.</p> <p>All of these things can't be dealt with, of course, in three minutes, and I'm not prepared to make any technical statement about it, but I think you should take into consideration that the impression of the community is -- is that this is going to be a significant degradation of what is a very beautiful beach, very unusual beach condition in Southern California.</p> <p>There aren't many white-sand beaches that are left that are in the quality condition that it's in. I would just make one further statement that this isn't entirely a problem that I would attribute to the Navy. Having lived around the Navy and watched its operations, including the helicopter operations, the Navy's done a good job, I think, of trying to concern itself with public impact. This isn't entirely the Navy's doing.</p> <p>It has to do, perhaps, with what really is a long-term problem of our poor political leadership out</p>	<p>The Navy is equally concerned with the future of the natural resources, wildlife, and quality of life for all areas of the world the Navy trains. The Navy has analyzed the potential impacts of their training within the SSTC EIS to ensure the future health and beauty of the Silver Strand and surrounding resources.</p>

#	Name or Organization	Comment	Response
		of Washington. Nevertheless, it looks like a very significant degradation of the community.	

#	Name or Organization	Comment	Response
359.	Ron Short	<p>I live in Imperial Beach about a block south of Camp Surf, which is the southern border of your training complex. My concerns are basically the -- sort of like the infringement on our quality of life down there. One is noise. You know, my wife and I were awakened in the middle of the night by live machine gunfire, and I suspect this sort of activity will continue to go on. I would appreciate a heads-up if that's going to be the case. At least we know what to expect. I know when they filmed Transformers II at that complex; they gave everybody in the community some heads-up, so we knew the pyrotechnics and stuff like that was coming.</p> <p>Another concern is the -- perhaps the increase in traffic on Silver Strand Boulevard going to the gate there at the southern end of the complex. You know, I would be -- I would like to know if you anticipate an increase in traffic, because that would also impact the quality of life down there.</p>	<p>The Navy is evaluating the possibility of extending advanced notification to the neighborhoods of Imperial Beach and Coronado through contact with City offices or the Naval Base Coronado website.</p> <p>With regard to traffic concerns at SSTC-S; the ADT of Silver Strand Boulevard was taken from the County of San Diego Department of Public Works, 1999. Public Road Standards. Adopted July 14, 1999. This is a public road, and the ADT was calculated for all traffic, which would include any military traffic. The FEIS used these ADT amounts to determine the contribution to overall traffic on public roads from military activities. In lieu of funding an additional ADT study, this was assumed to be an appropriate method for determining military contribution to overall traffic.</p> <p>As previously discussed, traffic volumes were not available for Silver Strand, the roadway that provides access into SSTC-S; however, based on the County of San Diego Public Road Standards, typical roadway capacity for a residential street operating at a LOS C is 1,500. The assumption is that without an ADT, the roadway is operating at this typical capacity. Section 3.14.2.2.1 states that the current level of trips associated with military activities is 147 into SSTC-S. As stated in Section 3.14.2.3.1, the increase in ADT from the NAA and the PA will be 102 (147 to 249). This will increase the overall ADT (assuming operation at normal capacity for a residential street at "C") to 1602, which represents a 6.8 percent increase in ADT.</p>

#	Name or Organization	Comment	Response
360.	Judy Haims	<p>I agree with the noise. That is a tremendous issue. You have no idea how much noise is generated down there. I've been there for 18 years. You -- the paper says that you have like 150 -- 150 sessions, and they're going to go up to 700-and-something. That's not a small increase.</p> <p>And they talk about the decibel level. It's ingenious to say the decibel level may stay the same. It may stay the same, but the amount and time and duration for the extra 550 sorties that you're going to have is tremendous, and that needs to be addressed.</p> <p>And also, the strand -- the Silver Strand is used tremendously all year long by campers. It's going to affect these people who don't have the opportunity that we do to live in Coronado. And this has just been too fast and too soon. You may have known about it, but the people who live here and enjoy this way of life are not aware or have not been until now.</p>	<p>Helicopter noise is addressed in Sections 3.6.2.2.1 and 3.6.2.3.2 of the FEIS. As described in the EIS, approximately 80 percent of the helicopter flight time associated with training activities at SSTC occur over water rather than over land, and because these aircraft fly offshore during transits between NASNI and SSTC, very little of this helicopter activity occurs over developed urban areas. As described in Section 3.6.1 of the FEIS (Affected Environment), a substantial amount of daytime and nighttime helicopter activity occurs in the vicinity of SSTC that is not associated with SSTC training activities. Community noise levels from cumulative helicopter traffic are addressed in Section 4 of the EIS (Cumulative Impacts).</p> <p>The FEIS addresses noise impacts on Silver Strand State Beach in Sections 3.6.2.2.1, 3.6.2.2.2, 3.6.2.2.3, 3.6.2.2.4, 3.6.2.2.6, and 3.6.2.3.7. Noise effects on public use of the beach are specifically addressed.</p>
361.	Shannon Davis	<p>One issue that has not been addressed on the south end of the project at Radio Receiving Facility is ambient lighting. I have driven down the strand in the middle of the night and seen lights on that were way too bright, and I have concern for the endangered species there and how that ambient lighting would affect the birds.</p> <p>And I'm also very concerned about the fact that you mentioned that you may want to take 200 men in a year's time of foot traffic through the vernal pools when they're dry. And you must understand that that is a very delicate ecotone. Some of it -- some of the vernal pools took thousands of years to come into the making, and there are sediments there that can be irrevocably destroyed.</p> <p>The eggs, though they are dormant and dry, come alive when the rain season comes. But they can be there for years without any activity there. And I'm concerned as to why you wouldn't fence those vernal pools and keep them in and the foot traffic out of there. So that's very much a concern.</p> <p>Also, I would have liked to have seen some studies included from U.S. Fish and Wildlife and from your biologist on the populations of the San Diego fairy shrimp. I would like to see if there are any other species in the vernal pools, if there is any possible genetic corruption from another species there.</p> <p>There was a study done by a Dr. Marie Sinedich S-i-n-e-d-i-c-h. She got her doctorate. In 2004, she did a study in all the vernal pools here in San Diego County, and she did it in cooperation with U.S. Fish and Wildlife, and the vernal pools at the Radio Receiving Facility were not included. And I -- my question is: Did the Navy not cooperate in those studies, and why wasn't that included in that inventory and in that study?</p>	<p>Ambient lighting impacts are not known, except to say that many of the nests are below the crest of the beach so car lights may not reach nesting birds. Lighting from facilities is set back and points away from beaches. The success of nesting fledging points to a potentially negligible effect of lighting. The Navy routine cooperates with local universities in research by way of cooperative agreement.</p> <p>The potential loss of vernal pool fairy shrimp will be minimized by avoiding the pools while they are dry. The nature of foot traffic entering the vernal pool area is dispersed. Each event is more likely to be one traverse over one pool, with a different path each time. The sizes of these pools vary, but they are large relative to the foot traffic, covering a total of 3.2 acres. While harm to cysts is expected and analyzed, the order of magnitude is expected to be a few cysts, compared to an estimated population of tens of thousands if not millions of cysts in these pools.</p>

#	Name or Organization	Comment	Response
		<p>And also, I would like to alert you to the fact that there is a steady decline in the endangered fairy shrimp and that they could go extinct if you have foot traffic in there. You could do irrevocable damage.</p>	<p>The Navy will avoid the occupied vernal pools and their watersheds adjacent to the road at SSTC-S Inland (i.e., pools 1 through 7 marked with flexi-stakes) year-round, to the maximum extent consistent with training needs. Foot traffic when the pools are dry consists primarily of small groups. As presented in Section 3.11 of the FEIS, trail forming and soil compaction are unlikely, resulting in no impact to population viability. Additionally, the Navy has completed consultation with the USFWS, and has received a signed Biological Opinion which concludes that proposed training activities will not jeopardize the continued existence of San Diego fairy shrimp.</p> <p>As part of the conditions of the Biological Opinion, the Navy will be completing a Vernal Pool Management and Monitoring Plan to help determine whether the impacts identified in the EIS remain at the low levels expected. The Plan will include a focused invasive plant inspection survey in the pools and their watersheds; plant, topographic, hydrological, and water quality surveys (including salinity); and protocol fairy shrimp surveys. In addition, the Navy will be determining the baseline distribution and abundance of San Diego fairy shrimp and condition of the vernal pool habitat prior to initiating training activities in or around the vernal pools at SSTC-S Inland. If impacts are more than the low levels anticipated or if impacts could lead to the extirpation of fairy shrimp from any individual pool, then the Navy will reinitiate consultation with the USFWS.</p> <p>The Proposed Actions will not all occur immediately, but will slowly scale up over time, and only after the baseline condition of the vernal pools has been established, and Vernal Pool Management and Monitoring Plan has been developed and approved by the USFWS. This gradual process will allow the Navy to evaluate the potential impacts, and take corrective action as necessary.</p>

#	Name or Organization	Comment	Response
			The Navy has established programs to address turn-over in personnel. Any new proposals that may affect listed species would need to be consulted on separately with the USFWS.
362.	Vicki Lambert	I'm a resident here in Coronado. We've talked a little bit about traffic mainly on the strand, but I live here in the village. And I can only see -- or foresee that traffic across the bridge and down Orange on 75 is going to increase with the number of people that are going to come from their homes in the San Diego area to do their training here. And I don't know if that has actually been -- that level of increase has been taken into account in the city planning. And with the tunnel discussions that we've been having, we need to also look at how we would deal with that increase along with our new carriers coming in. So thank you.	Proposed increases in training would not result in a direct increase in traffic on the bridge or on Orange Avenue. Future traffic increases have been accounted for, and are analyzed in the Transportation Section.

#	Name or Organization	Comment	Response
363.	Judy Haims	<p>What other sites could you use, and have you thought of other sites to use? Has there been a choice, or you just haven't told us that there was choices? And the thing that comes to my mind is what about using Camp Pendleton or renting the area from Pendleton or doing some kind of a swap or something, because you're going to have your beaches, you're going to have your landings, and you don't have the city with the quality of Coronado right in the middle of Pendleton.</p>	<p>The Navy strives to be a good neighbor, and analyzed all training activities at SSTC with respect to applicable air and water regulations. As described in Section 2.1 of the EIS, possible alternate locations for training have been explored through criteria that were established to aid in the determination of the feasibility of a site or range for training. Due to a number of factors (training area availability, environmental constraints, proximity to base, etc.), other sites were determined to not be reasonable locations for training; please see Section 2.1.3. A specific example (for Camp Pendleton) is now provided in the EIS to illustrate why alternate locations are not feasible.</p>



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Appendix G  
Agency Consultation



## APPENDIX G AGENCY CONSULTATION

The Navy has consulted with regulatory agencies as appropriate during the National Environmental Policy Act (NEPA) process and prior to implementation of the Proposed Action to ensure requirements have been met. The following is a list of the Silver Strand Training Complex (SSTC) regulatory agency consultation documentation. Agency correspondence and supporting documentation can be found on the SSTC EIS website at [www.silverstrandtrainingcomplexeis.com](http://www.silverstrandtrainingcomplexeis.com).

### California Coastal Commission, Coastal Zone Management Act

- U.S. Navy, May 2010. Final Silver Strand Training Complex Consistency Determination.
- California Coastal Commission, August 17, 2010. Coastal Consistency Determination Conditional Concurrence Letter.
- U.S. Navy, November 23, 2010. Final Coastal Consistency Determination Notification Response Letter.

### National Oceanic and Atmospheric Administration - National Marine Fisheries Service, Magnuson-Stevens Fishery Conservation and Management Act

- U.S. Navy, March 2010. Essential Fish Habitat Assessment for the Silver Strand Training Complex Environmental Impact Statement.
- National Marine Fisheries Service, October 13, 2010. Essential Fish Habitat Assessment consultation letter.
- U.S. Navy, November 10, 2010. Essential Fish Habitat Assessment consultation response letter.

### U.S. Fish and Wildlife Service, Endangered Species Act

- U.S. Navy, September 2008. Programmatic Biological Assessment for the Silver Strand Training Complex.
- U.S. Fish and Wildlife, July 7, 2010. Biological Opinion (FWS-SDG-08B0503-09F0517) on the U.S. Navy's Silver Strand Training Complex Operations, Naval Base Coronado, San Diego, CA.

### National Oceanic and Atmospheric Administration - National Marine Fisheries Service (Endangered Species Act

- U.S. Navy, March 2010. Request for Endangered Species Act Section 7 consultation on green sea turtle at SSTC.
- National Marine Fisheries Service, November 19, 2010. ESA informal consultation concurrence letter for the green sea turtle.

### National Oceanic and Atmospheric Administration - National Marine Fisheries Service, Marine Mammal Protection Act

- U.S. Navy, September 2010. Incidental Harassment Authorization Application for Navy Training Conducted within the Silver Strand Training Complex (replaces original IHA application submitted February 2010).
- National Marine Fisheries Service, October 19, 2010. Notice of Receipt of Incidental Harassment Authorization published in the Federal Register (75 FR 64276 - 64295).

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