



June 16, 2014

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act (NEPA), an environmental review has been performed on the following action.

**TITLE:** Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project

**LOCATION:** San Nicolas Island, California

**SUMMARY:** The National Marine Fisheries Service proposes issue and Incidental Harassment Authorization (Authorization) to the U.S. Navy for the take of marine mammals, incidental to the conduct of a roads and airfield repairs project on San Nicolas Island, California, between August and November 2014.

NMFS has prepared an Environmental Assessment (EA) titled "Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project," and prepared an independent Finding of No Significant Impact (FONSI). NMFS has determined that the impact of the activities may result, at worst, in a temporary modification in behavior and short-term displacement from haulout sites of three species of marine mammals. No injury or mortality is anticipated to result from this activity, nor is it authorized. Based on its review of the record, including the EA and FONSI, NMFS has determined that the issuance of an Authorization will not result in any significant direct, indirect, or cumulative impact to any element of the human environment. NMFS has determined that this activity will result in a negligible impact on the affected species or stocks and will not have an unmitigable adverse impact on the availability of affected species or stocks for taking for subsistence uses.

**RESPONSIBLE  
OFFICIAL:**

Donna S. Wieting  
Director  
Office of Protected Resources  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
1315 East-West Highway, Room 13821  
Silver Spring, MD 20910  
(301) 427-8400





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
PROGRAM PLANNING AND INTEGRATION  
Silver Spring, Maryland 20910

The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the EA and FONSI prepared by NMFS is enclosed for your information.

Although NOAA is not soliciting comments on this completed EA or FONSI, we will consider any comments submitted that would assist us in preparing future NEPA documents.

Please submit any written comments to the responsible official named above.

Sincerely,

A handwritten signature in dark ink, appearing to read "Patricia A. Montanio".

*pan*  
Patricia A. Montanio  
NOAA NEPA Coordinator





## NOAA FISHERIES

**PROPOSED ACTION:** Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project.

**TYPE OF STATEMENT:** Environmental Assessment

**LEAD AGENCY:** U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service

**RESPONSIBLE OFFICIAL:** Donna S. Wieting, Director  
Office of Protected Resources,  
National Marine Fisheries Service

**FOR FURTHER INFORMATION:** Candace Nachman  
National Marine Fisheries Service  
Office of Protected Resources  
Permits and Conservation Division  
1315 East West Highway  
Silver Spring, MD 20910  
301-427-8401

**LOCATION:** San Nicolas Island, California.

**ABSTRACT:** This Environmental Assessment analyzes the environmental impacts of the National Marine Fisheries Service, Office of Protected Resources proposal to issue an Incidental Harassment Authorization, pursuant to section 101(a)(5)(D) of the Marine Mammal Protection Act, to the U.S. Navy for the take of small numbers of marine mammals incidental to conducting a roads and airfield repairs project on San Nicolas Island, California.

**DATE:** June 2014

## TABLE OF CONTENTS

<b>Chapter 1</b>	<b>Introduction and Purpose and Need</b>	<b>1</b>
1.1.	Description of Proposed Action	1
1.1.1.	Background on the Navy’s MMPA Application	2
1.1.2.	Marine Mammals in the Action Area	2
1.2.	Purpose and Need	2
1.3.	The Environmental Review Process	3
1.3.1.	Laws, Regulations, or Other NEPA Analyses Influencing the EA’s Scope	4
1.3.2.	Scope of Environmental Analysis	5
1.3.3.	NEPA Public Scoping Summary	6
1.3.4.	Relevant Comments on Our <i>Federal Register</i> Notice	6
1.4.	Other Permits, Licenses, or Consultation Requirements	7
1.4.1.	National Environmental Policy Act	7
1.4.2.	Marine Mammal Protection Act	7
1.4.3.	Magnuson-Stevens Fishery Conservation and Management Act	7
<b>Chapter 2</b>	<b>Alternatives</b>	<b>8</b>
2.1.	Introduction	8
2.2.	Description of the Navy’s Proposed Activities	9
2.2.1.	Specified Time and Specified Area	9
2.2.2.	Beach Landings and Aggregate Materials Delivery	10
2.3.	Description of Alternatives	12
2.3.1.	Alternative 1 – Issuance of an Authorization with Mitigation Measures	12
2.3.2.	Alternative 2 – No Action Alternative	13
2.4.	Alternatives Considered but Eliminated from Further Consideration	14
<b>Chapter 3</b>	<b>Affected Environment</b>	<b>15</b>
3.1.	Physical Environment	15
3.1.1.	Marine Mammal Habitat	15
3.2.	Biological Environment	15
3.2.1.	Marine Mammals	15
<b>Chapter 4</b>	<b>Environmental Consequences</b>	<b>17</b>
4.1.	Effects of Alternative 1 – Issuance of an Authorization with Mitigation Measures	17
4.1.1.	Impacts to Marine Mammal Habitat	17
4.1.2.	Impacts to Marine Mammals	17
4.2.	Effects of Alternative 2 – No Action Alternative	19
4.2.1.	Impacts to Marine Mammal Habitat	20
4.2.2.	Impacts to Marine Mammals	20
4.3.	Compliance with Necessary Laws – Necessary Federal Permits	20
4.4.	Unavoidable Adverse Impacts	20
4.5.	Cumulative Effects	21
4.5.1.	Climate Change	21
4.5.2.	Past, Present, and Reasonably Foreseeable Future Actions	22
4.5.3.	U.S. Navy Military Readiness Activities	22
4.5.4.	U.S. Air Force Activities	24
4.5.5.	Ocean Pollution	26
4.5.6.	Marine Mammal Research and Geophysical Seismic Surveys	27
4.5.7.	Other Scientific Research Activities	27

4.5.8.	Commercial and Recreational Fishing.....	27
4.5.9.	Commercial Marine Traffic .....	27
4.5.10.	Wind Energy Facilities Project on SNI.....	28
4.5.11.	Conclusion .....	28
<b>Chapter 5</b>	<b>List of Preparers and Agencies Consulted.....</b>	<b>29</b>
<b>Chapter 6</b>	<b>Literature Cited.....</b>	<b>30</b>

## LIST OF ACRONYMS AND ABBREVIATIONS

Authorization	Incidental Harassment Authorization
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
dB	decibel
EA	Environmental Assessment
EELV	Evolved Expendable Launch Vehicle
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EPT	Elevating Platform Transporter
FONSI	Finding of No Significant Impact
ft	feet
FR	Federal Register
HSTT	Hawaii-Southern California Training and Testing
m	meter
mi	miles
MMPA	Marine Mammal Protection Act
MSFCMA	Magnuson-Stevens Fishery Conservation Management Act
NAO	NOAA Administrative Order
NAWCWD	Naval Air Warfare Center Weapons Division
NBVC	Naval Base Ventura County
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OMB	Office of Management and Budget
OPAREA	Operating Area
SNI	San Nicolas Island
USAF	US Air Force
USFWS	US Fish and Wildlife Service
VAFB	Vandenberg Air Force Base

## **Chapter 1 Introduction and Purpose and Need**

### **1.1. Description of Proposed Action**

The Marine Mammal Protection Act (MMPA) prohibits the incidental taking of marine mammals. The incidental take of a marine mammal falls under three categories: mortality, serious injury, or harassment, which includes injury and behavioral effects. The MMPA defines harassment as any act of pursuit, torment, or annoyance which: (1) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (2) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment). There are exceptions to the MMPA's prohibition on take such as the authority at issue here for us to authorize the incidental taking of small numbers of marine mammals by harassment upon the request of a U.S. citizen provided we follow certain statutory and regulatory procedures and make determinations. This exception is discussed in more detail in Section 1.2.

We propose to issue an Incidental Harassment Authorization (Authorization) to the U.S. Department of the Navy (Navy), Naval Base Ventura County (NBVC), California, under the MMPA for the incidental taking of small numbers of marine mammals, incidental to the conduct of a roads and airfield repairs project on San Nicolas Island (SNI), California. We do not have the authority to permit, authorize, or prohibit the Navy's activities under Section 101(a)(5)(D) of the MMPA, as that authority lies with a different Federal agency.

Our proposed action is a direct outcome of the Navy requesting an authorization under Section 101(a)(5)(D) of the MMPA to take marine mammals, by harassment, incidental to conducting a roads and airfield repairs project because the associated activities have the potential to take, by harassment, marine mammals during barge beach landings, offloading, and removal and construction activities to prepare for barge landings. The Navy therefore requires an Authorization for incidental take.

Our issuance of an Authorization to the Navy is a major federal action under the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations in 40 CFR §§ 1500-1508, and NOAA Administrative Order (NAO) 216-6. Thus, we are required to analyze the effects of our proposed action.

This Environmental Assessment (EA), titled "*Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project*," (hereinafter, EA) addresses the potential environmental impacts of two alternatives, namely:

- Issue the Authorization to the Navy for Level B harassment of marine mammals under the MMPA during their repairs project, taking into account the prescribed means of take, mitigation measures, and monitoring requirements required in the proposed Authorization; or
- Not issue an Authorization to the Navy in which case, for the purposes of NEPA analysis only, we assume that the activities would proceed and cause incidental take without the mitigation and monitoring measures that would otherwise be prescribed in a proposed Authorization.

### 1.1.1. Background on the Navy's MMPA Application

The Navy proposes to repair roads and the airfield on SNI, California. The proposed repair project would occur from August 1 through November 30, 2014, with two separate deliveries of materials to the island during this time period. Each delivery requires approximately 5 days to complete. The following specific aspects of the proposed repair project are likely to result in the take of marine mammals: barge beach landings, offloading, and removal and construction activities to prepare for barge landings.

### 1.1.2. Marine Mammals in the Action Area

The proposed repair project could adversely affect the following marine mammal species under our jurisdiction:

- Northern elephant seal (*Mirounga angustirostris*)
- California sea lion (*Zalophus californianus*)
- Pacific harbor seal (*Phoca vitulina richardsi*)

## 1.2. Purpose and Need

The MMPA prohibits “takes” of marine mammals, with a number of specific exceptions. The applicable exception in this case is an authorization for incidental take of marine mammals in section 101(a)(5)(D) of the MMPA.

Section 101(a)(5)(D) of the MMPA directs the Secretary of Commerce (Secretary) to authorize, upon request, the incidental, but not intentional, taking of small numbers of marine mammals of a species or population stock, by United States citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if we make certain findings and provide a notice of a proposed authorization to the public for review. Entities seeking to obtain authorization for the incidental take of marine mammals under our jurisdiction must submit such a request (in the form of an application) to us.

We have issued regulations to implement the Incidental Take Authorization provisions of the MMPA (50 CFR Part 216) and have produced Office of Management and Budget (OMB)-approved application instructions (OMB Number 0648-0151) that prescribe the procedures necessary to apply for authorizations. All applicants must comply with the regulations at 50 CFR § 216.104 and submit applications requesting incidental take according to the provisions of the MMPA.

**Purpose:** The primary purpose of our proposed action—the issuance of an Authorization to the Navy—is to authorize (pursuant to the MMPA) the take of marine mammals incidental to the Navy’s proposed activities. The Authorization, if issued, would exempt the Navy from the take prohibitions contained in the MMPA.

To authorize the take of small numbers of marine mammals in accordance with Section 101(a)(5)(D) of the MMPA, we must evaluate the best available scientific information to determine whether the take would have a negligible impact on marine mammals or stocks and not have an unmitigable adverse impact on the availability of affected marine mammal species for certain subsistence uses. We cannot issue an Authorization if it would result in more than a negligible impact on marine mammal species or stocks or if it would result in an unmitigable adverse impact on subsistence.

In addition, we must prescribe, where applicable, the permissible methods of taking and other means of effecting the least practicable impact on the species or stocks of marine mammals and their habitat (i.e., mitigation), paying particular attention to rookeries, mating grounds, and other areas of similar significance. If appropriate, we must prescribe means of effecting the least practicable impact on the availability of the species or stocks of marine mammals for subsistence uses. Authorizations must also include requirements or conditions pertaining to the monitoring and reporting of such taking in large part to better understand the effects of such taking on the species. Also, we must publish a notice of a proposed Authorization in the *Federal Register* for public notice and comment.

The purpose of this action is therefore to determine whether the take resulting from the Navy's roads and airfield repairs project would have a negligible impact on affected marine mammal species or stocks, would not have an unmitigable adverse impact on the availability of marine mammals for taking for subsistence uses, and develop mitigation and monitoring measures to reduce the potential impacts.

**Need:** On October 23, 2013, the Navy submitted an adequate and complete application demonstrating both the need and potential eligibility for issuance of an Authorization in connection with the activities described in section 1.1.1. We now have a corresponding duty to determine whether and how we can authorize take by Level B harassment incidental to the activities described in the Navy's application. Our responsibilities under section 101(a)(5)(D) of the MMPA and its implementing regulations establish and frame the need for this proposed action.

Any alternatives considered under NEPA must meet the agency's statutory and regulatory requirements. Our described purpose and need guide us in developing reasonable alternatives for consideration, including alternative means of mitigating potential adverse effects. Thus, we are developing and analyzing alternative means of developing and issuing an Authorization, which may require the applicant to include additional mitigation and monitoring measures in order for us to make our determinations under the MMPA.

### **1.3. The Environmental Review Process**

NEPA compliance is necessary for all "major" federal actions with the potential to significantly affect the quality of the human environment. Major federal actions include activities fully or partially funded, regulated, conducted, authorized, or approved by a federal agency. Because our issuance of an Authorization would allow for the taking of marine mammals consistent with provisions under the MMPA and incidental to the applicant's activities, we consider this as a major federal action subject to NEPA.

Under the requirements of NAO 216-6 section 6.03(f)(2)(b) for incidental harassment authorizations, we prepared this EA to determine whether the direct, indirect and cumulative impacts related to the issuance of an Authorization for incidental take of marine mammals during the conduct of the Navy's roads and airfield repairs project on SNI, California, could be significant. If we deem the potential impacts to be not significant, this analysis, in combination with other analyses incorporated by reference, may support the issuance of a Finding of No Significant Impact (FONSI) for the proposed Authorization.

### **1.3.1. Laws, Regulations, or Other NEPA Analyses Influencing the EA's Scope**

We have based the scope of the proposed action and nature of the two alternatives considered in this EA on the relevant requirements in section 101(a)(5)(D) of the MMPA. Thus, our authority under the MMPA bounds the scope of our alternatives. We conclude that this analysis—when combined with the analyses in the following documents—fully describes the impacts associated with the proposed repairs project with mitigation and monitoring for marine mammals. After conducting an independent review of the information and analyses for sufficiency and adequacy, we incorporate by reference the relevant analyses on the Navy's proposed action as well as a discussion of the affected environment and environmental consequences within the following documents per 40 CFR 1502.21 and NAO 216-6 § 5.09(d):

- our notice of the proposed Authorization in the *Federal Register* (79 FR 10777, February 26, 2014);
- *San Nicolas Island Roads and Airfield Repairs Project at Naval Base Ventura County San Nicolas Island Incidental Harassment Authorization Package* (U.S. Navy, 2013); and
- *Final Environmental Assessment for the San Nicolas Island Roads and Airfield Repairs Project Naval Base Ventura County, California* (U.S. Navy, 2012).

### **MMPA APPLICATION AND NOTICE OF THE PROPOSED AUTHORIZATION**

The CEQ regulations (40 CFR §1502.25) encourage federal agencies to integrate NEPA's environmental review process with other environmental reviews. We rely substantially on the public process for developing proposed Authorizations and evaluating relevant environmental information and provide a meaningful opportunity for public participation as we develop corresponding EAs. We fully consider public comments received in response to our publication of the notice of proposed Authorization during the corresponding NEPA process.

On February 26, 2013, we published a notice of proposed Authorization in the *Federal Register* (79 FR 10777), which included the following:

- a detailed description of the proposed action and an assessment of the potential impacts on marine mammals;
- plans for the Navy's mitigation and monitoring measures to avoid and minimize potential adverse impacts to marine mammals and their habitat and proposed reporting requirements; and
- our preliminary findings.

We considered the Navy's proposed mitigation and monitoring measures and determined that they would effect the least practicable impact on marine mammals. These measures include: (1) conducting construction activities only within the action footprint and providing maps to all contractors; (2) requiring attendance at a mandatory environmental briefing at the start of the work day for work to be performed in sensitive habitats and weekly (or as needed) mandatory environmental briefings for work in non-sensitive habitats; (3) inspecting construction equipment before mobilization to ensure no pinnipeds are under or near the equipment; (4) displacing pinnipeds from the landing site as necessary for the safety of the marine mammals and construction workers during barge landings and offloadings by a qualified project biologist and using temporary barriers, if necessary, to keep the displaced pinnipeds from re-entering the area; (5) conducting displacement in a manner that avoids stampedes (i.e., gradual approach); (6) avoiding displacement or flushing of pinnipeds, whenever possible, if dependent pups are present; (7)

suspending activities immediately if an injured marine mammal is found in the vicinity of the proposed activity area and the proposed activities could aggravate its condition further; (8) adhering to measures to prevent spillage of aggregate during the barge to barge transfer process; and (9) equipping vessels so that no oil, fuel or chemicals are discharged to waters of the state. Through the MMPA process, we preliminarily determined— provided that the Navy implements the required mitigation and monitoring measures —that the impact on marine mammals of conducting the proposed roads and airfield repairs project on SNI, California, from August through November 2014, would result, at worst, in a temporary modification in behavior of small numbers of certain species of marine mammals that may be hauled out in the vicinity of the proposed activity.

Within our notice, we requested that the public submit comments, information, and suggestions concerning the Navy’s request, the content of our proposed Authorization, and potential environmental effects related to the proposed issuance of the Authorization. This EA incorporates by reference and relies on the Navy’s application (U.S. Navy, 2013), our notice of a proposed Authorization (79 FR 10777, February 26, 2013), and other environmental analyses (U.S. Navy, 2012) to avoid duplication of analysis and unnecessary length.

In summary, those analyses suggest our conclusion that with the incorporation of monitoring and mitigation measures proposed by the Navy, the issuance of an Authorization to the Navy for the SNI roads and airfield repairs project would not result in any direct, indirect, or cumulative significant impacts. Based on our analysis, the intermittent frequency and short duration of the harassment from the repair project would allow adequate time for the marine mammals to recover from potentially adverse effects. Finally, the analyses concluded that NMFS did not expect that additive or cumulative effects of the repair project on its own or in combination with other activities would occur. Finally, the environmental analyses did not identify any significant environmental issues or impacts.

### **1.3.2. Scope of Environmental Analysis**

Given the limited scope of the decision for which we are responsible (*i.e.*, issue the Authorization including prescribed means of take, mitigation measures, and monitoring requirements; or not issue the Authorization) this EA provides more focused information on the primary issues and impacts of environmental concern related specifically to our issuance of the Authorization. This EA does not further evaluate effects to the elements of the human environment listed in Table 1 because previous environmental reviews have shown that the Navy’s proposed repairs project would not significantly affect those components of the human environment. Moreover, those analyses are consistent with our analyses regarding non-significant impacts to marine mammals.

**Table 1. Components of the human environment not affected by our issuance of an Authorization.**

<b>Biological</b>	<b>Physical</b>	<b>Socioeconomic / Cultural</b>
Amphibians	Air Quality	Commercial Fishing
Humans	Essential Fish Habitat	Military Activities
Non-Indigenous Species	Geography	Oil and Gas Activities
Seabirds	Land Use	Recreational Fishing
	Oceanography	Shipping and Boating
	State Marine Protected Areas	National Historic Preservation Sites
	Federal Marine Protected Areas	National Trails and Nationwide Inventory of Rivers
	National Estuarine Research Reserves	Low Income Populations
	National Marine Sanctuaries	Minority Populations
	Park Land	Indigenous Cultural Resources
	Prime Farmlands	Public Health and Safety
	Wetlands	Historic and Cultural Resources
	Wild and Scenic Rivers	
	Ecologically Critical Areas	

### 1.3.3. NEPA Public Scoping Summary

NAO 216-6 established agency procedures for complying with NEPA and the implementing NEPA regulations issued by the CEQ. Consistent with the intent of NEPA and the clear direction in NAO 216-6 to involve the public in NEPA decision-making, we requested comments on the potential environmental impacts described in the Navy’s MMPA application and in the *Federal Register* notice of the proposed Authorization. The CEQ regulations further encourage agencies to integrate the NEPA review process with review under the environmental statutes. Consistent with agency practice we integrated our NEPA review and preparation of this EA with the public process required by the MMPA for the proposed issuance of an Authorization.

The *Federal Register* notice of the proposed Authorization, combined with our preliminary determinations, supporting analyses, and corresponding public comment period are instrumental in providing the public with information on relevant environmental issues and offering the public a meaningful opportunity to provide comments to us for consideration in both the MMPA and NEPA decision-making processes.

The *Federal Register* notice of the proposed Authorization summarized our proposed action; stated that we would prepare an EA for the proposed action; and invited interested parties to submit written comments concerning the application and our preliminary analyses and findings including those relevant to consideration in the EA. The notice of the proposed Authorization was available for public review and comment from February 26, 2014, through March 28, 2014.

### 1.3.4. Relevant Comments on Our *Federal Register* Notice

During the 30-day public comment period on the notice of the proposed Authorization, we received only one comment letter from the Marine Mammal Commission which provides comments on most proposed

Incidental Take Authorizations as part of their established role under the MMPA (§ 202 (a)(2), “humane means of taking marine mammals”). The Marine Mammal Commission concurred with our preliminary determinations and recommended that we issue the rule and Authorization. We received no other substantive comments from the public and received no requests to view any of the previously completed NEPA documents.

We have considered the comments regarding monitoring and mitigation measures within the context of the MMPA requirement to effect the least practicable impact to marine mammals and their habitat. Consequently, we have determined, based on the best available data that the mitigation measures proposed by the Navy are the most feasible and effective monitoring and mitigation measures to achieve the MMPA requirement of effecting the least practicable impact on each marine mammal species or stock.

We will provide our response to the Marine Mammal Commission in the final Authorization *Federal Register* notice. We fully considered the Marine Mammal Commission’s comments in preparing the final Authorization and this EA. None of their comments require us to substantively change this EA.

#### **1.4. Other Permits, Licenses, or Consultation Requirements**

This section summarizes federal, state, and local permits, licenses, approvals, and consultation requirements necessary to implement the proposed action.

##### **1.4.1.National Environmental Policy Act**

Issuance of an Authorization is subject to environmental review under NEPA. NMFS may prepare an EA, an EIS, or determine that the action is categorically excluded from further review. While NEPA does not dictate substantive requirements for an Authorization, it requires consideration of environmental issues in federal agency planning and decision making. The procedural provisions outlining federal agency responsibilities under NEPA are provided in the CEQ’s implementing regulations (40 CFR §§1500-1508).

##### **1.4.2.Marine Mammal Protection Act**

The MMPA and its provisions that pertain to the proposed action are discussed above in section 1.2.

##### **1.4.3.Magnuson-Stevens Fishery Conservation and Management Act**

Under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), Federal agencies are required to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency which may adversely affect essential fish habitat (EFH) identified under the MSFCMA. EFH has been identified in the waters surrounding SNI. Habitats identified as EFH for groundfish around the repair project unloading sites include canopy kelp and an eelgrass bed. Distributional data for offshore waters of NBVC SNI indicate that at least 27 species of managed groundfish may occur in waters that fit the description of EFH, including roundfish, rockfishes, skates and sharks, and flatfish. NMFS’ action of authorizing harassment of marine mammals in the form of an Authorization does not impact EFH; therefore, an EFH consultation was not conducted by NMFS.

## **Chapter 2 Alternatives**

### **2.1. Introduction**

The NEPA and the implementing CEQ regulations (40 CFR §§ 1500-1508) require consideration of alternatives to proposed major federal actions and NAO 216-6 provides agency policy and guidance on the consideration of alternatives to our proposed action. An EA must consider all reasonable alternatives, including Alternative 1 (Preferred Alternative). It must also consider the No Action Alternative, even if that alternative does not meet the stated purpose and need. This provides a baseline analysis against which we can compare the other alternatives.

To warrant detailed evaluation as a reasonable alternative, an alternative must meet our purpose and need. In this case, as we previously explained in Chapter 1 of this EA, an alternative only meets the purpose and need if it satisfies the requirements under section 101(a)(5)(D) the MMPA. We evaluated each potential alternative against these criteria; identified one action alternative along with the No Action Alternative; and carried these forward for evaluation in this EA.

Alternative 1 includes a suite of mitigation measures intended to minimize potentially adverse interactions with marine mammals. This chapter describes the alternatives and compares them in terms of their environmental impacts and their achievement of objectives.

As described in Section 1.2, the MMPA requires that we must prescribe the means of effecting the least practicable impact on the species or stocks of marine mammals and their habitat. In order to do so, we must consider the Navy's proposed mitigation measures, as well as other potential measures, and assess how such measures could benefit the affected species or stocks and their habitat. Our evaluation of potential measures includes consideration of the following factors in relation to one another: (1) the manner in which, and the degree to which, we expect the successful implementation of the measure to minimize adverse impacts to marine mammals; (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation.

Any additional mitigation measure proposed by us beyond what the applicant proposes should be able to or have a reasonable likelihood of accomplishing or contributing to the accomplishment of one or more of the following goals:

- Avoidance or minimization of marine mammal injury, serious injury, or death wherever possible;
- A reduction in the numbers of marine mammals taken (total number or number at biologically important time or location);
- A reduction in the number of times the activity takes individual marine mammals (total number or number at biologically important time or location);
- A reduction in the intensity of the anticipated takes (either total number or number at biologically important time or location);
- Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base; activities that block or limit passage to or from biologically important areas; permanent destruction of habitat; or temporary destruction/disturbance of habitat during a biologically important time; and

- For monitoring directly related to mitigation, an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

## **2.2. Description of the Navy's Proposed Activities**

We presented a general overview of the Navy's SNI roads and airfield repairs project in our *Federal Register* notice of proposed Authorization (79 FR 10777, February 26, 2014). We incorporate those descriptions by reference in this EA and briefly summarize them here.

### **2.2.1. Specified Time and Specified Area**

The Navy proposes to conduct the beach landings and site preparation for those landings of aggregate material between August 1 and November 30, 2014, which is outside of the breeding season of the marine mammal species that occur in the project area. Up to four separate deliveries would occur each year for 5 years. One shipment of 13,000 tons of aggregate would require eight beach landings over 5 days (approximately two landings per day, 4 hours for each operation). Site preparation would take approximately 1 day, and the landings would occur over the remaining 4 days. However, in 2014, it is anticipated that only two deliveries would occur.

SNI is the outermost of eight Channel Islands off the coast of southern California, 63 nautical miles south-southwest of Laguna Point at NBVC Point Mugu and 75 nautical miles southwest of Los Angeles. SNI is owned by the Navy and is under the jurisdiction of NBVC. Access to the island by the public is strictly controlled for security reasons and to safeguard against potential hazards associated with military operations. The main support and operational facilities on SNI include an airfield runway and terminal, housing and administration facilities, a power plant, a fuel farm, a reverse osmosis potable water system, and a public works and transportation department. The beach landings and aggregate unloading is proposed to occur at one of two beaches on the eastern side of SNI: Daytona or Coast Guard Beaches.

Daytona Beach is a wide sandy beach at the south end of SNI, the most sheltered part of the island (see Figure 1). Water depth and soft bottom conditions off-shore support barge anchoring and beach landings. Beach Road is an all-weather paved access road that terminates at Daytona pier and a staging area. The equipment staging area is paved and equipped with electric light poles and adequate space for pier offloads. The staging area is enclosed by k-rails that would be temporarily moved to allow access to the beach-landed barge. The Navy has made barge beach landings at Daytona Beach many times in the past.

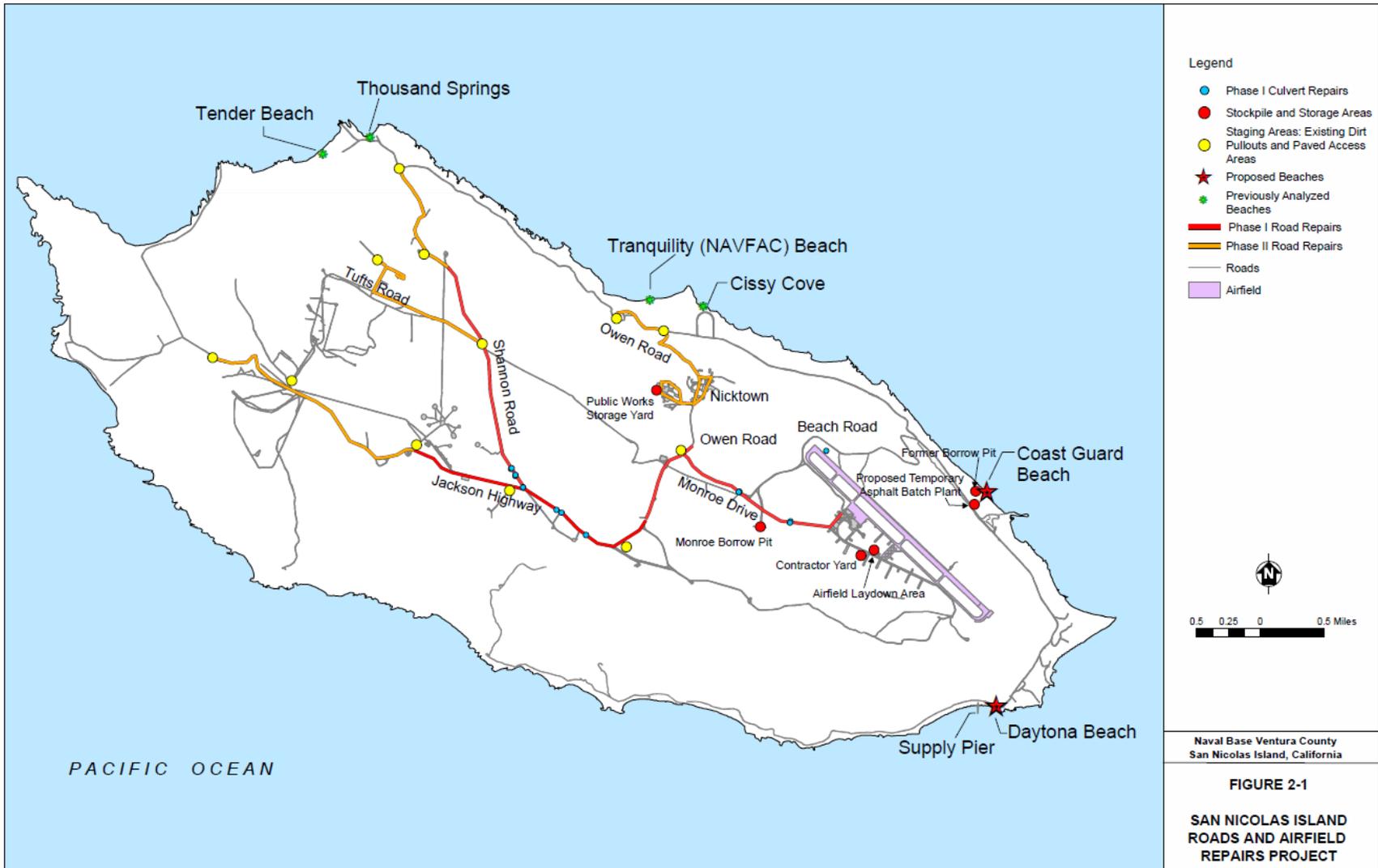
Coast Guard Beach is a sandy beach in a relatively sheltered part of the island at the east side of SNI, accessible by Beach Road (see Figure 1). The Navy has used this site successfully in the past for barge deliveries. On Coast Guard Beach, there is approximately 300 ft from the access road to the high tide line. Coast Guard Beach has a gentler slope than Daytona Beach. The nearshore bottom is soft, and water depths of 2 to 5 ft are suitable for beach landings. Existing moorings in the area may potentially be used as anchorage points for the primary shipping barge. A short (0.1 mi) unpaved road that connects Coast Guard Beach to the proposed asphalt batch plant site would require re-grading to facilitate materials transport. To facilitate re-grading the access road, approximately 400 yd<sup>3</sup> of dirt would be used from the Former Borrow Pit, and additional material would be sourced from the Monroe Borrow Pit if necessary. A shallow surface scrape of six inches would occur across the Former Borrow Pit site to collect material for the access road. Re-grading would provide access widths from 30 to 12.5 ft wide and a smoother surface for hauling.

### **2.2.2. Beach Landings and Aggregate Materials Delivery**

Aggregate would be shipped from the mainland U.S. to the offshore area of SNI on a primary shipping barge (13,000-ton capacity). The aggregate would be transferred from the primary shipping barge to a smaller “tender” barge (2,000-ton capacity) that would land on the beach. Aggregate would be transferred from the shipping barge to the tender barge using a conveyor belt or loaders, then from the tender barge to dump trucks on shore using either loaders or conveyor belts. Best management practices will be instituted to prevent spills into the ocean during the aggregate offloading process.

The delivery process consists of: site preparation; barge delivery; barge beach landing; offloading; and barge removal. Site preparation would begin the day before the tender barge arrives. A temporary sand ramp would be configured using bulldozers to push, grade, and compact sand perpendicular to the shoreline. The ramp would require moving about 20 yd<sup>3</sup> of beach sand at Daytona Beach, or a smaller volume of sand at Coast Guard Beach because of its more gradual slope. Sand would be moved only above the high tide line. Two tractors would be positioned 100 ft on either side of the landing area before the tender barge arrives to provide stable anchorage for the tender barge. A set of chains and cables would be attached to each tractor to secure the tender barge.

The primary shipping barge would drop anchor approximately 650 ft off-shore in about 24 ft of water at Coast Guard Beach and 45 ft of water at Daytona Beach. The tender barge would tie off to the primary shipping barge while the materials are being transferred. Materials would be offloaded to the tender barge using a conveyor belt or loader. Once the tender barge is loaded with approximately 2,000 tons from the primary shipping barge, it would cast off and the tug boat would push it onto the beach. The tender barge would be tethered to each of the two bulldozers, positioned approximately 200 ft apart on the beach. Aggregate would be offloaded from the tender barge either by loaders that load dump trucks or by a conveyor belt directly from the barge to dump trucks. After all offloading operations are complete, crew members would remove any fiberglass matting from the temporary ramp, and the bulldozers would redistribute the sand above the high-tide line and contour the beach to its previous topography. The anchoring cables and chains would be released and stored off site for future use. The tug would pull the barge away from the beach.



**Figure 1. Proposed Project Area for the Navy’s SNI Roads and Airfield Repairs Project.**

## **2.3. Description of Alternatives**

### **2.3.1. Alternative 1 – Issuance of an Authorization with Mitigation Measures**

The Proposed Action constitutes Alternative 1 and is the Preferred Alternative. Under this alternative, we would issue an Authorization (valid from August through November 2014) to the Navy allowing the incidental take, by Level B harassment, of three species of marine mammals subject to the mandatory mitigation and monitoring measures and reporting requirements set forth in the proposed Authorization, if issued, along with any additions based on consideration of public comments.

Our *Federal Register* notice requesting comments on the proposed Authorization analyzed the potential impacts of this Alternative in detail. We incorporate those analyses by reference in this EA and briefly summarize the mitigation and monitoring measures and reporting requirements that we would incorporate in the final Authorization, if issued, in the following sections.

#### **MITIGATION, MONITORING, AND REPORTING MEASURES**

To reduce the potential for disturbance associated with the activities, the Navy has proposed to implement several monitoring and mitigation measures for marine mammals. NMFS has proposed some additional measures. The proposed monitoring and mitigation measures include:

- (1) All construction activities will occur within the proposed action footprint, and contractors will be provided with maps delineating the area. Stakes will be used to delineate heavy equipment work and driving zones.
- (2) All construction personnel must attend a mandatory environmental briefing at the start of the work day for work to be performed in pinniped haulout sites, and personnel attendance must be documented.
- (3) Construction equipment must be inspected before mobilization to ensure no pinnipeds are under or near equipment.
- (4) If displacement of pinnipeds is conducted, temporary barriers must be used, if necessary, to keep the displaced pinnipeds from re-entering the area during activities.
- (5) Displacement must be conducted in such a way as to avoid stampedes. Approach of pinnipeds must be conducted gradually.
- (6) Displacement or flushing of pinnipeds should be avoided, whenever possible, if dependent pups are present.
- (7) The Navy will suspend activities immediately if an injured marine mammal is found in the vicinity of the proposed activity area and the proposed activities could aggravate its condition further. The incident must be reported to NMFS immediately.
- (8) No oil, fuel or chemicals will be allowed to be discharged to waters of the state. Vessels will be equipped with spill kits and cleanup materials, and operators will be trained in responding to an accidental release of oil, fuel, or chemicals. Offloading equipment will be checked for leaks at the start of beach grading and aggregate offloading each day.
- (9) Measures will be taken to prevent spillage of aggregate during the barge to barge transfer process. Measures may include but are not limited to, the use of a tarp or other barrier between the two barges, to capture spillage.
- (10) The Navy shall monitor marine mammal populations and evaluate interactions related to island activities.

- (11) The project biologist will record activities daily and provide electronic versions of biological monitoring reports at least weekly to Naval Facilities Engineering Command Southwest and NBVC.
- (12) The Navy shall monitor and protect island-wide pinniped breeding and haul-out sites and abide by the conditions for this monitoring program contained in the Integrated Natural Resources Management Plan.
- (13) The Navy is required to conduct monitoring of marine mammals present at the activity sites prior to, during, and for 30 minutes after the cessation of activities. Information to be recorded shall include the following: Species counts (with numbers of pups/juveniles); and Numbers of disturbances, by species and age, according to a three-point scale of intensity including (1) Head orientation in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a u-shaped position, or changing from a lying to a sitting position and/or slight movement of less than 1 m; “alert”; (2) Movements in response to or away from disturbance, typically over short distances (1-3 m) and including dramatic changes in direction or speed of locomotion for animals already in motion; “movement”; and (3) All flushes to the water as well as lengthier retreats (> 3 m); “flight”.

The Navy is required to submit a draft monitoring report to NMFS Office of Protected Resources within 90 days after the conclusion of the activities. A final report shall be prepared and submitted within 30 days following resolution of any comments on the draft report from NMFS. This report must contain the informational elements described in #13 above, at minimum. Additionally, a description of the activities conducted by the Navy and the monitoring protocols would be included in the report.

In our *Federal Register* notice of proposed Authorization, which we incorporate by reference, we preliminarily determined that the measures included in the proposed Authorization were sufficient to reduce the effects of the Navy’s activity on marine mammals to the level of least practicable impact. In addition, we described our analysis of impacts and preliminarily determined that the taking of small numbers of marine mammals, incidental to the Navy’s repair project would have a negligible impact on the relevant species or stocks and would not have an unmitigable adverse impact on affected species or stocks for taking for subsistence uses.

We have neither altered the mitigation, monitoring and reporting requirements to be included in the final Authorization nor have we received any information that would cause us to change our preliminary determinations under the MMPA. Accordingly, this Preferred Alternative would satisfy the purpose and need of our proposed action under the MMPA—issuance of an Authorization, along with required mitigation measures and monitoring that meets the standards set forth in section 101(a)(5)(D) of the MMPA and the implementing regulations.

### **2.3.2. Alternative 2 – No Action Alternative**

We are required to evaluate the No Action Alternative per CEQ NEPA regulations. The No Action Alternative serves as a baseline to compare the impacts of the Preferred and other Alternatives. Under the No Action alternative, we would not issue an Authorization to the Navy for the proposed repair project.

Under the No Action Alternative, the Navy could choose not to proceed with their proposed activities or to proceed without an Authorization. If they choose the latter, the Navy would not be exempt from the MMPA prohibitions against the take of marine mammals and would be in violation of the MMPA if take of marine mammals occurs.

For purposes of this EA, we characterize the No Action Alternative as the Navy not receiving an Authorization and the Navy conducting the SNI roads and airfield repairs project without the protective measures and reporting requirements required by an Authorization under the MMPA. We take this approach to meaningfully evaluate the primary environmental issues—the impact on marine mammals from these activities in the absence of protective measures.

#### **2.4. Alternatives Considered but Eliminated from Further Consideration**

NMFS considered whether other alternatives could meet the purpose and need and support the Navy's proposed repairs project. An alternative that would allow for the issuance of an Authorization with no required mitigation or monitoring was considered but eliminated from consideration, as it would not be in compliance with the MMPA and therefore would not meet the purpose and need. For that reason, this alternative is not analyzed further in this document.

## **Chapter 3    Affected Environment**

This chapter describes existing conditions in the proposed action areas. Complete descriptions of the physical, biological, and social environment of the action area are contained in the documents listed in Section 1.3.1 of this EA. We incorporate those descriptions by reference and briefly summarize or supplement the relevant sections for marine mammals in the following subchapters.

### **3.1. Physical Environment**

We are required to consider impacts to the physical environment under NOAA NAO 216-6. As discussed in Chapter 1, our proposed action and alternatives relate only to the authorization of incidental take of marine mammals and not to the physical environment. Certain aspects of the physical environment are not relevant to our proposed action (see subchapter 1.3.2 - Scope of Environmental Analysis). Because of the requirements of NAO 216-6, we briefly summarize the physical components of the environment here.

#### **3.1.1. Marine Mammal Habitat**

We presented information on marine mammal habitat and the potential impacts to marine mammal habitat in the *Federal Register* notice of the proposed Authorization. In summary, Coast Guard and Daytona Beaches are used as molting and resting areas for California sea lions, northern elephant seals, and Pacific harbor seals. Feeding does not occur on the beaches, rather the animals leave the beach haulout sites to forage in the water. No critical habitat exists in the area of the proposed activities.

### **3.2. Biological Environment**

#### **3.2.1. Marine Mammals**

We provide information on the occurrence of marine mammals most likely present in the proposed activity areas in section 1.1.2 of this EA. The marine mammals most likely to be harassed incidental to conducting the barge landing and aggregate material unloading activities associated with the SNI roads and repairs project are: California sea lions; northern elephant seals; and Pacific harbor seals. None of these species are listed as threatened or endangered under the Endangered Species Act. We provided information on the distribution, population size, and conservation status for each species in the proposed Authorization *Federal Register* notice, and we incorporate those descriptions by reference here. We briefly summarize this information here.

##### **3.2.1.1. California Sea Lions**

The California sea lion is the most common pinniped at SNI. They haul out at many sites along southern and western SNI, including Daytona Beach and Coast Guard Beach. They haul out on SNI beaches to mate and pup beginning in late May and continuing through July. During the molting period, they haul out in September, and smaller numbers of females and juveniles haul out intermittently throughout the year. Based on trends in pup counts from non-El Nino years from 1975-2005, the population appears to be increasing.

The SNI population has ranged from 43,000 to 57,000 individuals since 2001. Large numbers of sea lions haul out and pup 0.5 mi west of the barge landing site at Daytona Beach (U.S. Navy, 2002). Mixed age groups intermittently haul out in the vicinity of the Daytona Beach barge landing area throughout the year, and bachelor bulls haul out at the barge landing site during June and July (Smith, 2005).

### **3.2.1.2. Northern Elephant Seals**

SNI is the second largest elephant seal rookery and hauling ground in the Southern California Bight (Lowry, 2002). Each year, approximately 30% (23,000 individuals) of the elephant seals hauling out on all California shorelines haul out at SNI on Daytona Beach and Coast Guard Beach. Currently, elephant seals haul out at Daytona and Coast Guard barge landing areas from December through mid-May. This time frame encompasses the breeding season and the female and juvenile molting period. Adult males have been known to haul out at both Daytona and Coast Guard Beaches through August (Lowry, 2002). Based on trends in pup counts, northern elephant seal colonies were continuing to grow in California through 2005 (Carretta et al., 2013).

### **3.2.1.3. Pacific Harbor Seals**

Most harbor seals on SNI haul out at several specific, traditionally used sandy, cobble, and gravel beaches. Harbor seals are very rare at the barge landing area at Daytona Beach (Smith, 2005). However, West Coast Guard Beach is now the largest regularly used haul out on SNI (G. Smith, personal communication). Peak counts on SNI are about 450 seals, representing about 2 percent of the California stock.

Pupping occurs on beaches from late February through April on SNI, with nursing of pups extending into May. Harbor seals are abundant in late May and early June while they are molting and are least abundant in winter (Stewart and Yochem, 1984). Counts of harbor seals in California increased from 1981 to 2004, and the population on the Channel Islands seems to have stabilized (Carretta et al., 2013).

NMFS' [2012 Stock Assessment Report](#) (Carretta et al., 2013) also provides the latest abundance and life history information about each species/stock in California.

## **Chapter 4 Environmental Consequences**

This chapter of the EA analyzes the impacts of the two alternatives and addresses the potential direct, indirect, and cumulative impacts of our issuance of an Authorization. The Navy's application, our notice of a proposed Authorization, and other related environmental analyses identified previously, facilitate an analysis of the direct, indirect, and cumulative effects of our proposed issuance of an Authorization.

Under the MMPA, we have evaluated the potential impacts of the Navy's repair program activities in order to determine whether to authorize incidental take of marine mammals. Under NEPA, we have determined that an EA is appropriate to evaluate the potential significance of environmental impacts resulting from the issuance of our Authorization.

### **4.1. Effects of Alternative 1 – Issuance of an Authorization with Mitigation Measures**

Alternative 1 is the Preferred Alternative where we would issue an Authorization to the Navy allowing the incidental take, by Level B harassment, of three species of marine mammals from August through November 2014, subject to the mandatory mitigation and monitoring measures and reporting requirements set forth in the Authorization, if issued. We would incorporate the mitigation and monitoring measures and reporting described earlier in this EA into a final Authorization.

#### **4.1.1. Impacts to Marine Mammal Habitat**

Our proposed action (i.e., the issuance of an Authorization for the take of marine mammals) would have no additive or incremental effect on the physical environment beyond those resulting from the Navy's proposed repairs project. The Navy's proposed activity area is not located within a marine sanctuary or a National Park. The proposed activities would not result in substantial damage to ocean and coastal habitats that might constitute marine mammal habitat. The sandy bottom would be disturbed offshore when the shipping barge dropped anchors and when the tender barge landed on the beach. Contact with the seafloor would temporarily increase turbidity, but no long-term adverse effects would result. Turbidity events would be limited to the duration of barge landing and offload. We do not anticipate that the SNI roads and airfield repairs project would physically alter the marine environment or negatively impact the physical environment in the proposed action area. The MMPA Authorization would not impact physical habitat features, such as substrates and/or water quality, as the Authorization only allows for the take of marine mammals by Level B harassment and includes mitigation measures to reduce impacts to marine mammals and their habitat. More information on potential impacts to marine mammal habitat is contained in the Navy's application (U.S. Navy, 2013), the Navy's EA for the project (U.S. Navy, 2012), and our proposed Authorization notice, which are incorporated herein by reference.

#### **4.1.2. Impacts to Marine Mammals**

We expect that behavioral disturbance or displacement from the activities associated with the SNI roads and airfield repairs project have the potential to impact marine mammals. The majority of impacts are likely to occur from the presence of personnel and equipment during the proposed activities. Barge beach landings and associated construction could affect pinnipeds hauled out at Daytona and Coast Guard beaches in two main ways: (1) potential displacement of haul out areas at the barge landing site; and (2) potential impacts of sound associated with barge landing and construction. These activities are not anticipated to result in injury, serious injury, or mortality of any marine mammal species and none is proposed to be authorized. Our notice of proposed Authorization, the Navy's application (U.S. Navy, 2013), and the Navy's 2012 EA on the SNI roads and repairs project (U.S. Navy, 2012) provide detailed

descriptions of these potential effects of the proposed project activities on marine mammals. That information is incorporated herein by reference and summarized next.

The Navy historically has had to displace pinnipeds from Daytona Beach and Coast Guard Beach during past barge landings and during construction of the pier at Daytona Beach (in 2005), and during repairs of the water system at Coast Guard Beach (in 2005 and 2006). Pinniped populations at Daytona Beach increased dramatically during historical barge beach landings (Smith, 2005).

According to pinniped displacement reports from 2003 to 2006, individual marine mammals hauling out on Daytona Beach during barge beach landings and pier construction appeared temporarily affected by the associated sound and presence of humans and equipment. The steady increase of pinniped populations at Daytona Beach throughout the history of barge beach landings before construction of the pier and during construction of the pier, suggests that the animals are not adversely affected by these activities. Like at Daytona Beach, marine mammals hauling out on Coast Guard Beach during repairs of the water system did not appear to be affected by the associated sound and presence of humans and equipment. Typical responses to displacement included increased alertness, raising of the head, and movement laterally along the beach or in the direction of the water (2006 displacement letter from Grace Smith to Rod McInnis/NMFS). The continued use of Coast Guard Beach by elephant seals and sea lions suggests that the pinniped populations were not adversely affected by these activities. The barge landings are not expected to affect pups or pinniped breeding behavior because beach landings would only take place from August 1 to November 30, outside the breeding season.

It may be necessary, for authorized biologists to move pinnipeds, if present, before the barge performs a beach landing on SNI. While barges transfer material offshore, it is not anticipated that pinnipeds will exhibit startle responses or result in stampedes, as barges may be visible but are far enough off-shore to not cause a behavioral reaction. It is anticipated that marine mammals will move to other available beaches and haulouts on SNI, away from the barge beach landings at Daytona or Coast Guard beaches. It is unlikely that pinnipeds will abandon these haulouts permanently, as noted by the earlier presented information.

Acoustic impacts, such as hearing impairment are not anticipated, as equipment is located far enough away from pinnipeds. Sound levels will not occur at injurious levels.

Based on this information, we expect that these takes would result, at worst, in a temporary modification in behavior and/or temporary changes in animal distribution (Level B harassment) of certain species or stocks of marine mammals. At most, we interpret these effects on marine mammals as falling within the MMPA definition of Level B (behavioral) harassment. We expect these impacts to be minor because we do not anticipate measurable changes to the population or impacts to rookeries, mating grounds, and other areas of similar significance.

Under the Preferred Alternative, we would authorize incidental take, by Level B harassment only, of three species of marine mammals, which would include requirements pertaining to mitigation, monitoring, and reporting the take from the Navy's proposed repairs project. We expect no long-term or substantial adverse effects on marine mammals, their habitats, or their role in the environment. We base our conclusion on the results of previous monitoring for the same activities and anecdotal observations for the same activities in the proposed area.

The Navy proposed a number of monitoring and mitigation measures for marine mammals, and we included some additional mitigation measures not proposed by the Navy, as part of our evaluation for the Preferred Alternative. In consideration of the potential effects of the proposed repair project, we determined that the mitigation and monitoring measures described in Section 2.3.1 of this EA (see pages 13-14) would be appropriate for the preferred alternative to meet the Purpose and Need.

**Estimated Take of Marine Mammals by Level B Incidental Harassment:** The Navy has requested take by Level B harassment as a result of the presence of personnel and equipment at Coast Guard and Daytona Beaches during barge beach landings, offloading, and removal and construction activities to prepare for barge landings as part of the SNI roads and airfield repairs project. We expect that the proposed project would cause short-term behavioral disturbance and/or displacement for marine mammals in the proposed areas.

As mentioned previously, we estimate that the activities could potentially affect, by Level B harassment only, three species of marine mammals under our jurisdiction. For each species, these estimates are small numbers (less than two percent for each species) relative to the population sizes. Table 2 outlines the number of Level B harassment takes that we propose to authorize in this Authorization, the regional population estimates for marine mammals in the action area, the percentage of each population or stock that may be taken as a result of the Navy’s activities, and the trend of each marine mammal population.

**Table 2. Estimates of Level B harassment take and percentage of stocks potentially affected as a result of the Navy’s proposed repairs project.**

<b>Common Species Name</b>	<b>Estimated Take by Level B harassment</b>	<b>Abundance of Stock</b>	<b>Percentage of Stock Potentially Affected</b>	<b>Population Trend</b>
Northern elephant seal	250	124,000	0.2	Increasing
California sea lion	750	296,750	0.3	Increasing
Pacific harbor seal	500	30,196	1.7	Stable

Our proposed Authorization notice and the Navy’s application (U.S. Navy, 2013) contain complete descriptions of how these take estimates were derived. None of these have changed since those documents were published. In summary, the take estimates were based on surveys conducted by Navy biologists at Daytona and Coast Guard beaches in October and November 2011 to count/document pinniped presence. Based on the total number of days that would be needed to complete the two proposed shipment deliveries (i.e., 10 days) and the 2011 survey data, take estimates were derived. We do not expect the proposed activities to impact rates of recruitment or survival for any affected species or stock. Further, the activities would not adversely affect marine mammal habitat.

**4.2. Effects of Alternative 2 – No Action Alternative**

Under the No Action Alternative, we would not issue an Authorization to the Navy. As a result, the Navy would not receive an exemption from the MMPA prohibitions against the take of marine mammals and would be in violation of the MMPA if take of marine mammals occurs.

The impacts to elements of the human environment resulting from the No Action alternative—conducting the SNI roads and airfield repairs program in the absence of required protective measures for marine

mammals under the MMPA—would be greater than those impacts resulting from Alternative 1, the Preferred Alternative.

#### **4.2.1. Impacts to Marine Mammal Habitat**

Under the No Action Alternative, the repair project would have no additive effects on the physical environment beyond those resulting from the Navy's activities, which we evaluated in the referenced documents. Even if mitigation measures are not followed, impacts to marine mammal habitat would be minimal at Daytona and Coast Guard beaches. This Alternative would result in similar effects on the physical environment as Alternative 1.

#### **4.2.2. Impacts to Marine Mammals**

Under the No Action Alternative, the Navy's activities could result in increased amounts of Level B harassment to marine mammals and possibly takes by injury (Level A harassment), serious injury, or mortality due to the absence of mitigation and monitoring measures required under the Authorization. While it is difficult to provide an exact number of takes that might occur under the No Action Alternative, the numbers would be expected to be larger than those presented in Table 2 above because the Navy would not be required to abide by seasonal restrictions to reduce the number of takes and to avoid times of year when pups are more likely to be present.

If the activities proceeded without the protective measures and reporting requirements required by a final Authorization under the MMPA, the direct, indirect, and cumulative effects on the human or natural environment of not issuing the Authorization would include the following:

- Marine mammals within the repair project area could experience injury (Level A harassment) and potentially serious injury or mortality. The lack of mitigation measures required in the Authorization could lead to operators initiating use of construction equipment prior to inspection of the area around and under the equipment to ensure no pinnipeds are present. Moreover, displacement would not be required to occur in a gradual manner to avoid stampedes;
- Increases in the number of behavioral responses and frequency of changes in animal distribution because of the lack of mitigation measures required in the Authorization. Thus, the incidental take of marine mammals would likely occur at higher levels than we have already identified and evaluated in our *Federal Register* notice on the proposed Authorization; and
- We would not be able to obtain the monitoring and reporting data needed to assess the anticipated impact of the activity upon the species or stock; and increased knowledge of the species as required under the MMPA.

#### **4.3. Compliance with Necessary Laws – Necessary Federal Permits**

We have determined that the issuance of an Authorization is consistent with the applicable requirements of the MMPA, MSFMCA, and our regulations. Please refer to Section 1.4 of this EA for more information.

#### **4.4. Unavoidable Adverse Impacts**

The Navy's application, our notice of a proposed Authorization, and other environmental analyses identified previously summarize unavoidable adverse impacts to marine mammals or the populations to which they belong or on their habitats occurring in the proposed project area. We incorporate those documents by reference.

We acknowledge that the incidental take authorized would potentially result in unavoidable adverse impacts. However, we do not expect the Navy's activities to have adverse consequences on the viability of marine mammals in the Pacific Ocean or on SNI, and we do not expect the marine mammal populations in that area to experience reductions in reproduction, numbers, or distribution that might appreciably reduce their likelihood of surviving and recovering in the wild. We expect that the numbers of individuals of all species taken by harassment would be small (relative to species or stock abundance), that the proposed roads and airfield repairs project and the take resulting from the proposed project activities would have a negligible impact on the affected species or stocks of marine mammals.

The MMPA requirement of ensuring the proposed action has no unmitigable adverse impact to subsistence uses does not apply here because there are no permitted subsistence uses of marine mammals in the region.

#### **4.5. Cumulative Effects**

NEPA defines cumulative effects as “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” (40 CFR §1508.7). Cumulative impacts can result from individually minor but collectively significant actions that take place over a period of time.

Past, present, and foreseeable impacts to marine mammal populations include the following: commercial whaling; climate change affecting the prey base and habitat quality as a result of global warming; ship strikes; fishing gear entanglement; exposure to biotoxins and the resulting bioburden; acoustic masking from anthropogenic noise; competition with commercial fisheries; and killer whale predation. These activities account for cumulative impacts to regional and worldwide populations of marine mammals, many of whom are a small fraction of their former abundance. However, quantifying the biological costs for marine mammals within an ecological framework is a critical missing link to our assessment of cumulative impacts in the marine environment and assessing cumulative effects on marine mammals (Clark et al., 2009). Despite these regional and global anthropogenic and natural pressures, available trend information indicates that most local populations of marine mammals in the Pacific Ocean are stable or increasing (Carretta et al., 2013).

The proposed repairs project would add another, albeit temporary, activity in south-central California. This activity would be limited to a small area on SNI for a relatively short period of time. This section provides a brief summary of the human-related activities affecting the marine mammal species in the action area. Additional information on cumulative effects can be found in the Navy's 2012 EA (U.S. Navy, 2012).

##### **4.5.1. Climate Change**

The U.S. Fish and Wildlife Service's USFWS' draft EIS on the South Farallon Islands Invasive House Mouse Eradication Project (USFWS, 2013) summarizes the potential cumulative effects of climate change on marine mammals in the proposed repair project area. We incorporate the DEIS and its climate change analyses by reference and briefly summarize impacts here.

Climate change has the potential to indirectly impact marine mammals in central California in several different ways including: loss of suitable breeding habitat and food resources; a reduction in the foraging or breeding ranges; and a decrease in the overall population size in the region. Climate change would likely alter the ecosystem's food web which could affect marine mammals on SNI. Increased temperatures could push populations to a more suitable climate and impact adult survival and breeding (USFWS, 2013).

The primary threat to marine mammals is from loss of habitat and potential changes in food supply due to climate change. Sea level rise due to climate change could flood pinniped haul-out sites negatively impacting breeding success. Moreover, researchers anticipate that there would be long-term impacts to marine mammals resulting from climate change that could alter their composition and distribution on the Islands (USFWS, 2013).

With the large degree of uncertainty on the impact of climate change to marine mammals in central California, we recognize that warming of this region could affect the prey base and habitat quality for marine mammals. Nonetheless, we expect that ongoing and future Navy activities on SNI and the issuance of an Authorization to the Navy would not result in any noticeable contributions to climate change. Furthermore, there will be no additive or synergistic effects from climate change on the marine mammals listed in the Authorization resulting from the authorization of take.

#### **4.5.2. Past, Present, and Reasonably Foreseeable Future Actions**

Other environmental analyses identified previously summarize the potential cumulative effects to marine mammals or the populations to which they belong or on their habitats occurring in the action area. We incorporate those documents and analyses by reference and briefly summarize them here. Thus, this cumulative effects analysis focuses on the activities that may temporally or geographically overlap with the Navy's activities and would most likely impact the marine mammals present in the proposed areas.

Current human activities within the proposed action area are limited mostly due to the fact that this is military land. We consider the impact of the Navy's presence and effects of conducting activities in the proposed action areas to be insignificant when compared to other human activities in the area.

#### **4.5.3. U.S. Navy Military Readiness Activities**

The term "military readiness activities", as defined in Public Law 107-314, Section 315(f), includes "training and operations of the Armed Forces that relate to combat" and constitute "adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation and suitability for combat use." The National Defense Authorization Act of FY 2004 (Public Law) amended the MMPA definition of "harassment" as applied to military readiness activities, and discussions of potential Level A and Level B harassment in this subsection are in accordance with those specific definitions.

In addition to the proposed SNI repairs project, the Navy is conducting activities within the vicinity of the proposed action area, and these activities are proposed to continue. These current and proposed naval operations include missile launch operations from SNI and training activities in the Hawaii-Southern California Training and Testing (HSTT) Study Area. These activities are described below.

### Missile Launch Operations from SNI

The Naval Air Warfare Center Weapons Division (NAWCWD) is the Navy's full-spectrum research, development, test, and evaluation center of excellence for weapons systems associated with air warfare, aircraft weapons integration, missiles and missile subsystems, and assigned airborne electronic warfare systems. NAWCWD is a multi-site organization that includes the Point Mugu Sea Range. NAWCWD began a launch program for missiles and targets from several launch sites on SNI in 2001 and plans to continue these activities. The purpose of these launches is to support test and training activities associated with operations on the NAWCWD Point Mugu Sea Range. The Sea Range is used by the U.S. and allied military services to test and evaluate sea, land, and air weapon systems; to provide realistic training opportunities; and to maintain operational readiness of these forces.

The vehicles are launched from one of several fixed locations on the western end of SNI and fly generally westward through the Point Mugu Sea Range. Launches involve supersonic and subsonic vehicles. NAWCWD plans to launch up to 40 vehicles from SNI per year, but this number can vary depending on operational requirements. Up to 10 launches per year may occur at night. Nighttime launches will only take place when required by the test objectives, e.g., when testing the Airborne Laser system. For this system, missiles must be launched at night when the laser is visible.

Impacts on marine mammals involve both acoustic and non-acoustic effects. Acoustic effects relate to sound produced by the engines of all launch vehicles and, in some cases, their booster rockets. Potential non-acoustic effects could result from the physical presence of personnel during placement of video and acoustical monitoring equipment. However, careful deployment of monitoring equipment is not expected to result in any disturbance to pinnipeds hauled out nearby. Any visual disturbance caused by passage of a vehicle overhead is likely to be minor and brief as the launch vehicles are relatively small and move at great speed. Only Level B behavioral harassment of Pacific harbor seals, California sea lions, and northern elephant seals is expected as a result of these activities. There is a small chance that a pup might be injured or killed during a stampede of pinnipeds on the shore during a vehicle launch, but this has not been documented in videotaped records of pinniped groups during launches at SNI between 2001 and 2012 (Holst et al., 2005a, b; 2008, Holst and Greene, 2010; Ugoretz and Greene, 2012). The 2008 comprehensive technical report, which covered activities between August, 2001, and March, 2008, indicates that pinniped behavioral responses to launch sounds were, with the exception of some responses by Pacific harbor seals, usually brief and not severe (Holst et al., 2008). According to Holst et al. (2008), northern elephant seals exhibited little reaction to launch sounds: raising of the head; moving a short distance; or on rare occasions, entering the water. Sea lions either raised their heads before quickly returning to pre-launch behavior or moved short distances and rarely entered the water after a launch (Holst et al., 2008). Within seconds of a launch, the harbor seals usually rushed into the water and did not return to the haul-outs for several hours. However, video recordings indicate that most returned by the next day (Holst and Lawson, 2002).

NAWCWD received two Authorizations for these activities in 2001 and 2002. NMFS then issued regulations to cover these activities in 2003 (68 FR 52132; September 2, 2003), which expired on October 2, 2008. We issued regulations in 2009 for the same activities (74 FR 26580, June 3, 2009), which became effective on June 2, 2009, and expire on June 2, 2014. Between August 2001 and December 2012, NAWCWD conducted 69 launches from August 2001-October 2005; 15 launches from February 2006-December 2010; and 14 launches from January 2011-December 2012 from the western end of SNI,

with no more than 25 launches in any one year. We have received an application from the Navy to continue missile launch operations on SNI, and we are considering rulemaking for the 2014-2019 timeframe.

#### HSTT Study Area

The HSTT Study Area is comprised of established operating and warning areas across the north-central Pacific Ocean, from Southern California to Hawaii and the International Date Line. The Study Area includes three existing range complexes: the Hawaii Range Complex, the Southern California Range Complex, and the Silver Strand Training Complex. Each range complex is an organized and designated set of specifically bounded geographic areas, which includes a water component (above and below the surface), airspace, and sometimes a land component. Operating areas (OPAREAs) and special use airspace are established within each range complex. The Navy's mission is to organize, train, equip, and maintain combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. The Navy executes this responsibility by establishing and executing training programs, including at-sea training and exercises, and ensuring naval forces have access to the ranges, OPAREAs, and airspace needed to develop and maintain skills for the conduct of naval operations. Activities involving research, development, test, and evaluation for naval systems are an integral part of this readiness mandate.

Within the HSTT Study Area, the Navy plans to conduct training and testing activities that will utilize active tactical sonar sources that fall primarily into the category of Anti-submarine Warfare exercises and proposes to conduct training and testing activities that require underwater detonations. These activities will include the use of mid- and high-frequency active sonar (and may include activities involving underwater detonations) within the vicinity of the proposed action area for the Air Force's proposed activities. The HSTT Study Area activities may cause various impacts, including primarily Level B harassments, to marine mammal species in the study area. Impacts from the active sonar and underwater detonations will occur while the animals are in the water, whereas impacts from the Air Force's activities will occur while the animals are hauled out. NMFS issued five-year regulations to the Navy for the activities in the HSTT Study Area on December 24, 2013 (78 FR 78106).

#### **4.5.4. U.S. Air Force Activities**

##### Delta Mariner Operations and Harbor Activities

In order to support the Delta IV/Evolved Expendable Launch Vehicle (EELV) launch activity from Space Launch Complex-6 at Vandenberg Air Force Base (VAFB), the U.S. Air Force (USAF) hired a contractor to conduct harbor maintenance dredging at VAFB. Other harbor activities in support of the Delta IV/EELV include *Delta Mariner* operations, cargo unloading activities, and kelp habitat mitigation. Pacific harbor seals and California sea lions may be taken by Level B behavioral harassment incidental to these activities. Northern elephant seals also have the potential to be taken but in even smaller numbers than harbor seals and sea lions. A very small number of Steller sea lions have also been seen in the vicinity since 2012.

*Delta Mariner* associated noise sources are ventilating propellers used for maneuvering vessel into position and a popping sound the cargo bay door makes when disengaged (no actual measurements have been taken outside the vessel). Dredging the harbor involves considerable activity and the use of noisy, heavy equipment. Noise intensity decreases proportional to the square root of the distance from the

source. A dredging crane at the end of the dock producing 88 dBA of noise would still be quite noisy (approximately 72 dBA) at the nearest beach or the end of the breakwater, roughly 76 m (250 ft) away. Cargo unloading activities create sound when the common booster core is removed from the *Delta Mariner* through use of the Elevating Platform Transporter (EPT). The EPT produces approximately 85 dBA, measured less than 6.1 m (20 ft) from the engine exhaust, when the engine is running at mid speed. Prior to movement, the EPT operator sounds the horn to alert personnel in close proximity to the EPT that it is about to operate. The EPT operation procedure requires two short beeps of the horn (approx. 1/3 sec. each) prior to starting the ignition. Sound level measurements for the horn ranged from 84-112 dBA at 7.6 m (25 ft) away and 62-70 dBA at 61 m (200 ft) away. To accommodate the *Delta Mariner*, the harbor will need to be dredged, removing up to 5,000 cubic yards of sediment per dredging. Dredging will involve the use of heavy equipment, including a clamshell dredge, dredging crane, a small tug, dredging barge, dump trucks, and a skip loader. Measured sound levels from this equipment are roughly equivalent to those estimated for the wharf modification equipment: 43-81 dBA at 76 m (250 ft).

NMFS has issued annual Authorizations for these activities every year, beginning in 2002. The most recent Authorization was effective from September 26, 2012, through September 25, 2013. On February 4, 2014, the *Delta Mariner* operations were incorporated into the rulemaking for the VAFB Launch Activities and Aircraft and Helicopter Operations (79 FR 10016) for the period March 26, 2014, through March 26, 2019. The primary impacts to marine mammals from these activities are expected to be short-term behavioral reactions in response to the acoustic and visual stimuli produced by the heavy machinery used. The activities are short-term in nature and would not disturb or displace marine mammals for long periods of time. NMFS anticipates that no injury or mortality will result from these actions. No cargo unloading or Delta Mariner operations have occurred since 2004. The last harbor dredging activity occurred in December, 2002. Monitoring of harbor seals and sea lions during two previous dredging events and wharf modification activities showed that they responded to sudden noises or unexpected visual stimuli with a head alert initially and occasionally would flush from the haul-out. Sea lions appeared to be much less sensitive to disturbance, even when they were close to the activity. Visual events that invoked harbor seal responses included the crane boom swinging suddenly and shadows caused by equipment that was backlit during nighttime dredging activities. The seals and sea lions continued to frequent the harbor area during the construction activities despite the presence of noise and activity.

#### Rocket and Missile Launches and Aircraft Operations from VAFB

VAFB is headquarters to the 30th Space Wing, USAF Space Command unit that operates VAFB and the Western Range. VAFB operates as a missile test base and aerospace center, supporting west coast space launch activities for the USAF, Department of Defense, National Aeronautics and Space Administration, and commercial contractors. VAFB is the main west coast launch facility for placing commercial, government, and military satellites into polar orbit on expendable (unmanned) launch vehicles and for testing and evaluation of intercontinental ballistic missiles and sub-orbital target and interceptor missiles. In addition to space vehicle and missile launch activities at VAFB, there are helicopter and aircraft operations for purposes such as search-and-rescue, delivery of space vehicle components, launch mission support, and security reconnaissance. There are currently six active space launch vehicle facilities at VAFB, used to launch satellites into polar orbit. These facilities support the launch programs for space vehicles including the Atlas V, Delta II, Delta IV, Falcon, Minotaur, and Taurus.

The USAF activities create two types of noise: continuous/intermittent (but short-duration) noise, due mostly to combustion effects of aircraft and launch vehicles, and impulsive noise, due to sonic boom effects. Launch operations, particularly the operation of launch vehicle engines, are the major source of noise considered to have a potential to affect pinnipeds that are hauled out on or in the vicinity of VAFB. Generally, noise is generated from four sources during launches: (1) Combustion noise from launch vehicle chambers; (2) jet noise generated by the interaction of the exhaust jet and the atmosphere; (3) combustion noise from the post-burning of combustion products; and (4) sonic booms. Launch noise levels are highly dependent on the type of first-stage booster and the fuel used to propel the vehicle. Therefore, there is similarity in launch noise production within each class size of launch vehicles.

The noise generated by VAFB activities will result in the incidental harassment of pinnipeds, both behaviorally and in terms of physiological (auditory) impacts. The noise and visual disturbances from space launch vehicle and missile launches and aircraft and helicopter operations may cause the animals to move towards the water or enter the water. However, these reactions are usually short-term and minimal. The main concern on the Northern Channel Islands is potential impacts from sonic booms created during launches of space vehicles from VAFB. Sonic booms are impulse noises, as opposed to continuous (but short-duration) noise such as that produced by aircraft and rocket launches. In the pinnipeds observed, small sonic booms between 1 to 2 pounds per square foot usually elicited a heads up response or slow movement toward and entering the water, particularly for pups. With respect to impacts on pinniped hearing, NMFS previously determined that VAFB launch and missile activities, including sonic booms, could have an impact on the hearing of pinnipeds (63 FR 39055, July 21, 1998). These impacts would be limited to temporary threshold shift, lasting between minutes and hours, depending on exposure levels. Subsequent information from Auditory Brainstem Response testing on harbor seals following Titan IV, Taurus, and Delta IV launches indicates that no PTS resulted from these launches. Therefore, only Level B harassment of Pacific harbor seals, California sea lions, northern elephant seals, and northern fur seals is expected as a result of these activities.

NMFS has been issuing Authorizations to the USAF to conduct these activities for more than 20 years. The first MMPA authorization pursuant to Section 101(a)(5) became effective in 1986. NMFS issued regulations to the USAF to conduct these activities from February 7, 2009, through February 6, 2014 (74 FR 6236, February 6, 2009). During that period a total of 9 missiles and 13 rockets were launched. On February 24, 2014 NMFS reissued regulations to the USAF to conduct launch activities from March 26, 2014 through March 26, 2019 (79 FR 10016). The 5-year launch activity shall not exceed 75 missile and 175 rocket launches without additional coordination with NMFS.

#### **4.5.5. Ocean Pollution**

Environmental contaminants in the form of waste materials, sewage, and toxins are present in, and continue to be released into, the oceans off southern California. Polluted runoff, or non-point source pollution, is considered the major cause of impairment of California's ocean waters. Storm water runoff from coastal urban areas and beaches carries waste such as plastics and Styrofoam into coastal waters. Sewer outfalls also are a source of ocean pollution in southern California. Sewage can be treated to eliminate potentially harmful releases of contaminants; however, releases of untreated sewage occur due to infrastructure malfunctions, resulting in releases of bacteria usually associated with feces, such as *Escherichia coli* and *enterococci*. Bacteria levels are used routinely to determine the quality of water at recreational beaches, and as indicators of the possible presence of other harmful microorganisms. Marine

mammals sometimes mistake plastics and other marine debris as food and ingest the garbage, which can ultimately lead to mortality because of malnutrition, choking, or other problems.

#### **4.5.6. Marine Mammal Research and Geophysical Seismic Surveys**

Marine mammal research and geophysical seismic survey cruises operate within the Pacific Ocean along the California coast. While some marine mammal surveys introduce no more than increased vessel traffic impacts to the environment, seismic surveys use various methods (e.g., airgun arrays) to conduct research. The use of airguns during seismic surveys does not impact pinnipeds while they are hauled out, only when they are in the water. Other studies that involve biopsy sampling and tagging might result in Level B or even Level A harassment to marine mammals. There are several active research permits along the California coastline that allow activities that have the potential to result in either Level A or Level B harassment (e.g., vessel/aerial surveys, photo-identification, collection of sloughed skin, tagging, capture and handling, etc.). Many of these permits only allow the incidental harassment of California sea lions, Pacific harbor seals and northern elephant seals during studies of other marine mammal species in the vicinity. While there are currently no active geophysical seismic surveys occurring in southern California waters, NMFS has authorized seismic surveys along the Pacific in the past but none are proposed to occur between August and November 2014. Results from research studies conducted in the area indicate that the activities only have temporary, short-term impacts on the behavior of the animals. The activities do not result in the injury or mortality of the animals.

#### **4.5.7. Other Scientific Research Activities**

Research on other animal species, such as seabirds, has historically occurred along the California coastline. There is currently only one active Authorization for the incidental harassment of pinnipeds during scientific research studies for seabird research; however, these research activities do not occur in the vicinity of SNI. NMFS has issued Authorizations in the past for the incidental harassment of pinnipeds hauled out on SNI during black abalone research. The most recent Authorization for this activity expired in February, 2013. The most common responses of the pinnipeds noted to date include brief startle reactions as noted by lifting of the head or movement of less than one meter (three feet) and flushing into the water. These activities have not resulted in any injury or mortality of pinnipeds.

#### **4.5.8. Commercial and Recreational Fishing**

Commercial and recreational fishing constitute a significant use of the ocean area near SNI. There are 519 recognized California marine fish species. According to the California Department of Fish and Game (CDFG), in 2012, the three top commercial finfish species by landing in the Santa Barbara area were Pacific sardine (2,121,258 pounds), sablefish (370,908 pounds), and white seabass (207,027 pounds). The total commercial landings for all species brought into the Santa Barbara area in 2012 were valued at over 10 million dollars, with dockside landings totaling almost 7 million pounds (CDFG, 2013). In addition, recreational and charter fishing activities are popular along the waters of southern California. These activities could result in by-catch of marine mammals, entanglement in fishing gear, and reduce prey availability for marine mammals.

#### **4.5.9. Commercial Marine Traffic**

There are three major ports near or just south of the proposed action area. The Port of Los Angeles is the busiest port in the U.S. (by volume of cargo). The Port of Long Beach is the second busiest U.S. port.

Taken together, these two ports (which are contiguous) would constitute the fifth busiest port in the world. The Port of San Diego is also an important commercial cargo port. Cruise ships make daily use of these port facilities. In 2006, San Diego recorded 219 cruise ship calls (619,000 passengers), while Los Angeles recorded 1.2 million cruise passengers served. Together, these three ports recorded about 8,500 vessel (cargo and cruise ship) calls in 2006. Ship strikes are potential sources of serious injury or mortality to large whales; however, the occurrence of ship strikes of pinnipeds is rare to nonexistent. Effects to pinnipeds from large commercial vessels are believed to be primarily potential effects from sound, which could decrease foraging success and predator detection.

#### **4.5.10. Wind Energy Facilities Project on SNI**

The purpose of this project is to create cost-efficient renewable energy that would help maximize the Navy's ability to meet or exceed the renewable energy goals as mandated in the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007, and Executive Order 13423. The project is needed to allow NBVC SNI to become more energy self-sufficient. The project would include the construction and operation of up to 11 wind turbines, construction of an energy storage system, and underground utility conduit connections at NBVC SNI. Energy generated by the wind turbines would serve to supplement energy demands on NBVC SNI that are currently met by JP-5 fueled diesel generators. The 100-kilowatt (kW) wind turbines would be mounted on 121-foot-tall monopole steel towers, with internal ladder access. The blades would rotate at up to 59 revolutions per minute, electrical production would be three-phase 480-volt alternating current, blade diameter would be approximately 68 feet, and the total height from the ground level to the tip of rotation would be 155 feet. Lighting would be installed on each wind turbine and would be a red, intermittent flashing light. The proposed wind development project would include trenching along the existing roadway network.

All construction materials, components of wind turbines, and construction equipment would be barged to NBVC SNI from NBVC Port Hueneme. All barge trips would offload on the NBVC SNI supply pier and be transported via vehicle to the project site.

Impacts to marine mammals in the area would be similar to those described in Chapter 4 of this EA, as the barging operations would be similar to those conducted under the proposed SNI roads and airfield repairs project.

#### **4.5.11. Conclusion**

Based on the summation of activity in the area provided in this section, NMFS determined that the incremental impact of an Authorization for the proposed Navy roads and airfield repairs project on SNI would not be expected to result in a cumulative significant impact to the human environment from past, present, and future activities. The potential impacts to marine mammals, their habitats, and the human environment in general are expected to be minimal based on the limited and temporary footprint and mitigation and monitoring requirements of the Authorization.

## **Chapter 5 List of Preparers and Agencies Consulted**

### **Agencies Consulted**

No other persons or agencies were consulted in preparation of this EA.

### **Prepared By**

Candace A. Nachman

Fishery Biologist

Permits and Conservation Division

Office of Protected Resources, NOAA/National Marine Fisheries Service

## Chapter 6 Literature Cited

- Carretta, J.V., K.A. Forney, M.S. Lowry, J. Barlow, J. Baker, B. Hanson, and M.M. Muto. 2013. U.S. Pacific marine mammal stock assessments: 2012. U.S. Dep. Commer. NOAA Tech. Memo. NMFS-SWFSC-504. 378 pp.
- California Department of Fish and Game (CDFG). 2013. Final California Commercial Landings for 2012. State of California, The Resources Agency, Department of Fish and Game. <https://www.dfg.ca.gov/marine/landings/landings>.
- Clark, C. W., Ellison, W. T., Southall, B. L., Hatch, L., Van Parijs, S. M., Frankel, A., & Ponirakis, D. (2009). Acoustic masking in marine ecosystems: intuitions, analysis, and implication. *Marine Ecology Progress Series*, 395, 201-222.
- Holst, M. and J.W. Lawson. 2002. Behavior of pinnipeds during target missile launches. p. 3-1 to 3-27 In: J.W. Lawson, E.A. Becker, and W.J. Richardson (eds.) *Marine mammal and acoustical monitoring of target and missile launches on San Nicolas Island, August 2001 – July 2002*. LGL Rep. TA2630-3. Report from LGL Ltd., King City, Ont., and Greeneridge Sciences Inc., Santa Barbara, CA, for Naval Air Warfare Center Weapons Division, Point Mugu, CA, and National Marine Fisheries Service, Silver Spring, MD.
- Holst, M. and C.R. Greene, Jr., with W.J. Richardson, T.L. McDonald, K. Bay, R.E. Elliott, and V.D. Moulton. 2005a. Marine mammal and acoustical monitoring of missile launches on San Nicolas Island, California, August 2001 – May 2005. LGL Rep. TA2665-5. Rep. from LGL Ltd., King City, Ont., and Greeneridge Sciences Inc., Santa Barbara, CA, for Naval Air Warfare Center Weapons Division, Point Mugu, CA, and National Marine Fisheries Service, Silver Spring, MD, and Long Beach, CA.
- Holst, M., J.W. Lawson, W.J. Richardson, S.J. Schwartz and G. Smith. 2005b. Pinniped responses during Navy missile launches at San Nicolas Island, California. p. 477-484 In: D.K. Garcelon and C.A. Schwemm (eds.), *Proc. 6th Calif. Isl. Sympos.*, Ventura, CA, Dec. 2003. *Nat. Park Serv. Tech. Publ. CHIS-05-01. Inst. Wildl. Stud.*, Arcata, CA.
- Holst, M. and C.R. Greene, Jr., with W.J. Richardson, T.L. McDonald, K. Bay, R.E. Elliott, and R. Norman. 2008. Marine mammal and acoustical monitoring of missile launches on San Nicolas Island, California, August 2001 – March 2008. LGL Rep. TA4617-1. Rep. from LGL Ltd., King City, Ont., and Greeneridge Sciences Inc., Santa Barbara, CA, for Naval Air Warfare Center Weapons Division, Point Mugu, CA, and Nat. Mar. Fish. Serv., Silver Spring, MD, and Long Beach, CA.
- Holst, M. and C.R. Greene, Jr. 2010. Marine mammal and acoustical monitoring during vehicle launches on San Nicolas Island, California, June 2009 – June 2010. LGL Rep. TA4896-2. Rep. from LGL Ltd., King City, Ont., and Greeneridge Sciences Inc., Santa Barbara, CA, for Naval Air Warfare Center Weapons Division, Point Mugu, CA, and Nat. Mar. Fish. Serv., Silver Spring, MD, and Long Beach, CA. 59 p.
- Lowry, M. S. 2002. Counts of northern elephant seals at rookeries in the Southern California Bight: 1981-2001. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Science Center, La Jolla, CA.

- Smith, G. 2005. Report of pinniped displacement activities at the San Nicolas Island barge landing area December 2004-May 2005. NAVAIR Range Sustainability Office.
- Stewart, B. S., and P. K. Yochem. 1984. Seasonal Abundance of Pinnipeds on San Nicolas Island, California, 1980-1982. Bulletin of the Southern California Academy of Sciences 83: 121-32.
- Ugoretz, J. and C.R. Greene, Jr. 2012. Pinniped Monitoring During Missile Launches on San Nicolas Island, California, September 2011 - September 2012. Naval Air Warfare Center Weapons Division, Point Mugu, CA. 65 p.
- USFWS. 2013. South Farallon Islands Invasive House Mouse Eradication Project: Draft Environmental Impact Statement. Fremont, CA. U.S. Department of the Interior. U.S. Fish and Wildlife Service, Pacific Southwest Region San Francisco Bay National Wildlife Refuge Complex. 738 pp.
- U.S. Navy. 2002. Environmental Assessment to Construct a Supply Pier at San Nicolas Island, Ventura County, California. Prepared by Naval Air Weapons Station, China Lake. September.
- U.S. Navy. 2012. Final Environmental Assessment for the San Nicolas Island Roads and Airfield Repairs Project Naval Base Ventura County, California. Prepared by Naval Base Ventura County. Long Beach, CA. 265 pp.
- U.S. Navy. 2013. San Nicolas Island Roads and Airfield Repairs Project at Naval Base Ventura County San Nicolas Island Incidental Harassment Authorization Package. Prepared by Environmental Division, Naval Base Ventura County. Long Beach, CA. 47 pp.

**FINDING OF NO SIGNIFICANT IMPACT  
FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION  
TO THE U.S. NAVY FOR THE TAKE OF MARINE MAMMALS INCIDENTAL TO THE  
SAN NICOLAS ISLAND ROADS AND AIRFIELD REPAIRS PROJECT**

**NATIONAL MARINE FISHERIES SERVICE**

**BACKGROUND**

The National Marine Fisheries Service (NMFS) received an application from the U.S. Navy (Navy) requesting an Incidental Harassment Authorization (Authorization) under the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1631 *et seq.*) for the incidental taking of marine mammals incidental to conducting a roads and airfield repairs project on San Nicolas Island (SNI), California, from August through November 2014.

Under the MMPA, NMFS, shall grant authorization for the incidental taking of small numbers of marine mammals if we find that the taking will have a negligible impact on the species or stock(s), and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant). The Authorization must prescribe, where applicable, the permissible methods of taking; other means of effecting the least practicable impact on the species or stock and its habitat; and requirements pertaining to the mitigation, monitoring and reporting of such taking.

The proposed action is a direct outcome of the Navy requesting an Authorization to take marine mammals, by harassment, incidental to conducting the SNI roads and airfield repairs project. The Navy's activities, which have the potential to behaviorally disturb marine mammals, warrant an incidental take authorization from us under section 101(a)(5)(D) of the MMPA.

In accordance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations in 40 CFR §§ 1500-1508, and National Oceanographic and Atmospheric Administration (NOAA) Administrative Order (NAO) 216-6, we completed an Environmental Assessment (EA) titled, *Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project*. We incorporate this EA in its entirety by reference.

We have prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of our selected alternative—Alternative 1 (Preferred Alternative) titled, “Issuance of an Authorization with Mitigation Measures,” and our conclusions regarding the impacts related to our proposed action. Under this Alternative, we would issue an Authorization under the MMPA with required mitigation, monitoring, and reporting measures. Based on our review of the Navy's proposed action and the measures contained within Alternative 1, we have determined that no direct, indirect, or cumulatively significant impacts to the human environment would occur from implementing the Preferred Alternative.

## ANALYSIS

NAO 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the CEQ regulations at 40 CFR §1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below this section is relevant to making a finding of no significant impact. We have considered each criterion individually, as well as in combination with the others. We analyzed the significance of this action based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

### **1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMP)?**

*Response:* We do not expect that our action of issuing an Authorization to the Navy or the Navy’s proposed repairs project would cause substantial damage to the ocean and coastal habitats and/or essential fish habitat. Barge landing operations could cause disruption or modification of benthic habitats or turbidity of the water quality. However, these impacts would be limited in time and space and reversible. The mitigation and monitoring measures required by the Authorization would not affect habitat or essential fish habitat (EFH).

EFH has been identified in the waters surrounding SNI. Effects on EFH by the repairs project and issuance of the Authorization assessed here would be temporary and minor. The main effect would be short-term disturbance that might lead to temporary and localized relocation of the EFH species or their food. The actual physical and chemical properties of the EFH will not be impacted. Therefore, NMFS, Office of Protected Resources, Permits and Conservation Division has determined that the issuance of an Authorization for the taking of marine mammals incidental to the SNI roads and airfield repairs project will not have an adverse impact on EFH, and an EFH consultation is not required.

### **2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?**

*Response:* We do not expect that our action of issuing an Authorization to the Navy or the Navy’s proposed repairs project would have a substantial impact on biodiversity and/or ecosystem function within the affected environment. The proposed action may temporarily disturb marine mammals in the proposed action areas, but the effects would be short-term and localized.

### **3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?**

*Response:* We do not expect that our action of issuing an Authorization to the Navy or the Navy’s proposed repairs project would have a substantial adverse impact on public health or safety, as the taking, by harassment, of marine mammals would pose no human risk. Additionally, SNI is owned by the Navy and not accessible to the general public.

**4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?**

**Response:** We have determined that our issuance of an Authorization and the Navy’s proposed repairs project would likely result in limited adverse effects to California sea lions, northern elephant seals, and Pacific harbor seals. The EA evaluates the affected environment and potential effects of both proposed actions, indicating that only the presence of personnel and equipment during the proposed activities have the potential to affect marine mammals in a way that requires authorization under the MMPA. The activities and any required mitigation measures would not affect physical habitat features, such as substrates and water quality.

We have determined that the proposed activities may result in some Level B harassment (in the form of short-term and localized changes in behavior and displacement) of small numbers, relative to the population sizes, of three species of marine mammals, none of which are listed under the Endangered Species Act (ESA; 16 U.S.C. 1531 *et seq.*). There will be no effects to critical habitat, as none exists in the proposed project area.

To reduce the potential for disturbance from the activities, the Navy will implement several monitoring and mitigation measures for marine mammals, which are outlined in the EA. Taking these measures into consideration, we expect that the responses of marine mammals from the Preferred Alternative would be limited to temporary displacement from the area and/or short-term behavioral changes, falling within the MMPA definition of “Level B harassment.” We do not anticipate that take by injury (Level A harassment), serious injury, or mortality would occur, nor would we authorize take by injury, serious injury, or mortality. We expect that harassment takes would be at the lowest level practicable due to the incorporation of the proposed mitigation measures.

**5) Are significant social or economic impacts interrelated with natural or physical environmental effects?**

**Response:** We expect that the primary impacts to the natural and physical environment would be temporary in nature (and not significant) and not interrelated with significant social or economic impacts. Issuance of an Authorization or the Navy’s activity would not result in inequitable distributions of environmental burdens or access to environmental goods as the action is confined to military personnel and contractors. Issuance of the Authorization could have an indirect beneficial social impact, as it will improve conditions on SNI, used by military personnel for both work and personal activities.

We have determined that issuance of the Authorization would not adversely affect low-income or a minority population—as our action only affects marine mammals. Further, there would be no impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses, as there are no such uses of marine mammals in the proposed action area. Therefore, we expect that no significant social or economic effects would result from our issuance of an Authorization or the Navy’s proposed repairs project.

**6) Are the effects on the quality of the human environment likely to be highly controversial?**

**Response:** The effects of our issuance of an Authorization for the take of marine mammals incidental to the proposed activities are not highly controversial. Other activities that have authorized the temporary displacement of hauled out pinnipeds from California beaches have not raised substantial concerns, and we are unaware of any party characterizing these activities as

controversial. Specifically, we did not receive any comments raising substantial questions or concerns about the size, nature, or effect of potential impacts from our proposed action or the Navy's proposed repairs project. There is no substantial dispute over effects to marine mammals.

**7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?**

*Response:* Issuance of the Authorization or the Navy's proposed project are not expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas as it would only authorize harassment to marine mammals. The action area does not contain, and is not adjacent to, areas of notable visual, scenic, historic, or aesthetic resources that would be substantially impacted. Moreover, the issuance of the Authorization would not impact EFH. (See responses to questions 1 and 2.)

**8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?**

*Response:* The potential risks associated with roads and airfield repairs projects and the associated barge beach landings and preparations are not unique or unknown, nor is there significant uncertainty about impacts. NMFS has issued Authorizations for similar activities or activities with similar types of marine mammal harassment in California and conducted NEPA analysis on those projects. Each Authorization required marine mammal monitoring, and monitoring reports have been reviewed by NMFS to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded NMFS' analysis under the MMPA and NEPA. Therefore, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks.

**9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?**

*Response:* Issuance of an Authorization to the Navy or the Navy's proposed repairs project is not related to other actions with individually insignificant but cumulatively significant impacts. Few projects occur on SNI, which may result in harassment to marine mammals, as the island is owned and operated by the military and not accessible by the public. Therefore, we do not expect that the impacts would be cumulatively significant. Any future Authorizations would have to undergo the same permitting process and would take the Navy's proposed repairs project into consideration when addressing cumulative effects.

**10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?**

*Response:* We have determined that the issuance of an Authorization to the Navy and the Navy's proposed repairs project would not adversely affect entities listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significant scientific, cultural, or

historical resources. The proposed action is limited to the authorization to harass marine mammals consistent with the MMPA definition of “Level B harassment.”

**11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?**

**Response:** The issuance of an Authorization to the Navy is not expected to result in the introduction or spread of a non-indigenous species into the human environment, as equipment that could cause such effects are not proposed for use. Moreover, the Authorization does not mandate marine transits outside of the local area or have any relation to bilge water or other potential causes of the introduction or spread of a non-indigenous species.

**12) Is the proposed action likely to establish a precedent for future actions with significant effects or does it represent a decision in principle about a future consideration?**

**Response:** Our proposed action of issuing an Authorization would not set a precedent for future actions with significant effects or represent a decision in principle. Each MMPA authorization applied for under 101(a)(5)(D) must contain information identified in our implementing regulations. We consider each activity specified in an application separately and, if we issue an Authorization to an applicant, we must determine that the impacts from the specified activity would result in a negligible impact to the affected species or stocks and would not have an unmitigable adverse impact on the availability of marine mammals for subsistence uses. Our issuance of an Authorization may inform the environmental review for future projects, but would not establish a precedent or represent a decision in principle about a future consideration.

**13) Can the proposed action reasonably be expected to violate any Federal, State, or local law or requirements imposed for the protection of the environment?**

**Response:** The issuance of an Authorization would not result in any violation of federal, state, or local laws for environmental protection. The applicant is required to obtain any additional federal, state and local permits necessary to carry out the proposed activities.

**14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?**

**Response:** The proposed action allows for the taking, by incidental harassment, of marine mammals during the proposed roads and airfield repairs project on SNI, California. We have determined that marine mammals may exhibit behavioral changes or incur temporary displacement from haul out beaches within the action area. However, we do not expect the authorized harassment to result in significant cumulative adverse effects on the affected species or stocks. We do not expect that the issuance of an Authorization would result in any significant cumulative adverse effects on target or non-target species incidentally taken by harassment due to human presence.

Cumulative effects refer to the impacts on the environment that result from a combination of past, existing, and reasonably foreseeable human activities and natural processes. Because of the relatively small area of potential disturbance and the temporary nature of the potential disturbance or displacement along with the corresponding mitigation measures, the action would not result in synergistic or cumulative adverse effects that could have a substantial effect on any species.

The proposed repairs project does not target any marine species, and we do not expect it to result in any individual, long-term, or cumulative adverse effects on the species incidentally taken by harassment due to these activities. The potential temporary behavioral disturbance and/or displacement of marine species might result in short-term behavioral effects for these marine species within the disturbed areas, but we expect no long-term displacement of marine mammals as a result of the proposed action conducted under the requirements of the Authorization. Thus, we do not expect any cumulative adverse effects on any species as a result of our action.

**DETERMINATION**

In view of the information presented in this document and the analysis contained in the supporting EA titled, *Issuance of an Incidental Harassment Authorization to the U.S. Navy for the Take of Marine Mammals Incidental to the San Nicolas Island Roads and Airfield Repairs Project*, we, NMFS, have determined that issuance of an Incidental Harassment Authorization to the Navy for the take, by Level B harassment only, of marine mammals incidental to conducting a roads and airfield repairs project on SNI, California, in accordance with Alternative 1 in the EA would not significantly impact the quality of the human environment, as described in this FONSI and in the EA.

In addition, we have addressed all beneficial and adverse impacts of the action to reach the conclusion of no significant impacts. Accordingly, the preparation of an Environmental Impact Statement for this action is not necessary.

Perry GAYAWO

JUN 12 2014

for

Donna S. Wieting  
Director, Office of Protected Resources,  
National Marine Fisheries Service

Date